

SERVICE MANUAL

WA1 CHASSIS

MODEL	COMMANDER	DEST	MODEL	COMMANDER	DEST
<i>KL V-20SR3</i>	<i>RM-Y1108</i>	<i>AEP</i>			



KL V-20SR3



RM-Y1108

FLAT PANEL COLOR TV
SONY®

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WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD DUE TO LIVE CHASSIS, THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARKED $\triangle$ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

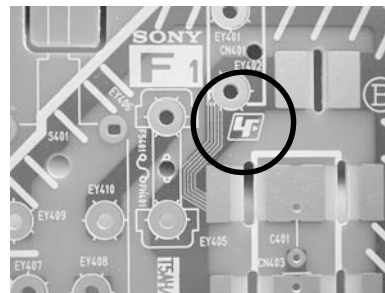
CAUTION

Lead Free Soldered Boards

The circuit boards listed below [Table 1] used in these models may have been processed using Lead Free Solder. The boards are identified by the LF logo located close to the board designation e.g. F1, H1 etc [see examples]. The servicing of these boards requires special precautions to be taken as outlined below.



example 1



example 2



Table 1

Board	Function
A	Tuner, Audio, Chroma Decoder, Scart 1
G	Power Supply
H1	Control Buttons
H2	Front Input, HP Output
H3	Scart 2
H5	IR Receiver & LED's

It is strongly recommended to use Lead Free Solder material in order to guarantee optimal quality of new solder joints. Lead Free Solder is available under the following part numbers :

Partnumber	Diameter	Remarks
7-640-005-19	0.3mm	0.25Kg
7-640-005-20	0.4mm	0.50Kg
7-640-005-21	0.5mm	0.50Kg
7-640-005-22	0.6mm	0.25Kg
7-640-005-23	0.8mm	1.00Kg
7-640-005-24	1.0mm	1.00Kg
7-640-005-25	1.2mm	1.00Kg
7-640-005-26	1.6mm	1.00Kg

Due to the higher melting point of Lead Free Solder the soldering iron tip temperature needs to be set to 370 degrees centigrade. This requires soldering equipment capable of accurate temperature control coupled with a good heat recovery characteristics.

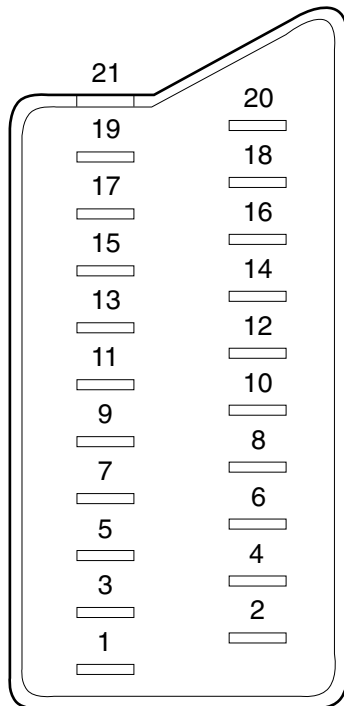
For more information on the use of Lead Free Solder, please refer to <http://www.sony-training.com>

ITEM MODEL	Television System	Stereo System	Channel Coverage	Color System
AEP	B/G/H, D/K, I, L	GERMAN/NICAM Stereo	VHF : E2-12, R1-R12, S01-S03, F02-F10, B-Q UHF : E21-69, F21-F69, B21-B69, R21-R69 CABLE TV : S01-S20 HYPER : S21-S41	PAL, SECAM NTSC3.58, NTSC4.43 (VIDEO IN)

Flat Panel		LCD(Liquid Crystal Display) 20 inches (approx. 51cm measured diagonally).	Sound output	
			Right and Left speaker	3W
			General Specifications	
Input/Output Terminals [REAR]				
1: 21-pin Euro connector (CENELEC standard)	Inputs for Audio and Video signals. Inputs for RGB. Outputs of TV Video and Audio signals.	Power Requirements	220 - 240V	
		Power Consumption	65W/0.5W	
2: 21-pin Euro connector	Inputs for Audio and Video signals. Inputs for S Video. Outputs of TV Video and Audio signals. (selectable). Smartlink interface.	Dimensions	Approx 504x509x250mm	
		Weight	9Kg	
Phono Jacks	Variable Output for audio signals	Supplied Accessories	RM-Y1108 Remote Commander (1) IEC designated R6 battery (2) Mains (type C-6) Cable (1) Mains (type BF) Cable (1)	
Input/Output Terminals [SIDE]			Other Features	Teletext, Smartlink, Sleep Timer, Picture Freeze, TV system autodetection.
Headphone jack	stereo mini jack	Remote Control System : Infrared Control		
Audio inputs	phono jacks	Power requirements	3V dc 2 batteries IEC designation R6 (size AA)	
Video inputs	phono jacks			
S Video input	4 pin mini DIN			
Design and specifications are subject to change without notice.				

Model Name Item	KLV-20SR3
PAP	OFF
PAT	OFF
RGB Priority	ON
DRC	OFF
Scart 1	ON
Scart 2	ON
Front in (3)	ON
Projector	OFF
Norm B/G	ON
Norm I	ON
Norm D/K	ON
Norm AUS	OFF
Norm L	ON
Norm SAT	OFF
Norm M	OFF
Teletext	ON
Nicam Stereo	ON

21 pin connector



Pin No	1	2	3	Signal	Signal level
1	○	○	○	Audio output B (right)	Standard level : 0.5V rms Output impedance : Less than 1kohm*
2	○	○	○	Audio input B (right)	Standard level : 0.5V rms Output impedance : More than 10kohm*
3	○	○	○	Audio output A (left)	Standard level : 0.5V rms Output impedance : Less than 1kohm*
4	○	○	○	Ground (audio)	
5	○	○	○	Ground (blue)	
6	○	○	○	Audio input A (left)	Standard level : 0.5V rms Output impedance : More than 10kohm*
7	○	●	●	Blue input	0.7 +/- 3dB, 75 ohms positive
8	○	○	○	Function select (AV control)	High state (9.5-12V) : Part mode Low state (0-2V) : TV mode Input impedance : More than 10K ohms Input capacitance : Less than 2nF
9	○	○	○	Ground (green)	
10	○	○	○	Open	
11	○	●	●	Green	Green signal : 0.7 +/- 3dB, 75 ohms, positive
12	○	○	○	Open	
13	○	○	○	Ground (red)	
14	○	○	○	Ground (blanking)	
15	○	-	-	Red input	0.7 +/- 3dB, 75 ohms, positive
	-	○	○	(S signal Chroma input)	0.3 +/- 3dB, 75 ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1-3V) Low state (0-0.4V) Input impedance : 75 ohms
17	○	○	○	Ground (video output)	
18	○	○	○	Ground (video input)	
19	○	○	○	Video output	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
20	○	-	-	Video input	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
	-	○	○	Video input Y (S signal)	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
21	○	○	○	Common ground (plug, shield)	

○ Connected ● Not Connected (open) * at 20Hz - 20kHz

Rear Connection Panel



Side Connection Panel



S-Video socket

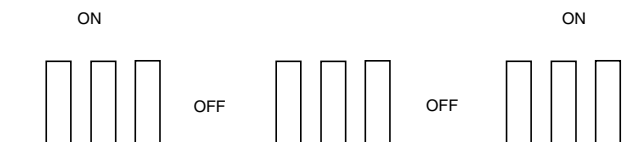
S Video socket pin configuration		
Pin No	Signal	Signal Level
1	Ground	-
2	Ground	-
3	Y (S signal) input	1V+/- 3dB 75ohm, positive Sync. 0.3V -3 +10dB
4	C (S signal) input	0.3V+/- 3dB 75ohm, positive Sync.

WA1 SELF DIAGNOSTIC SOFTWARE

The identification of errors within the WA1 chassis is triggered in one of two ways :- 1: Busy or 2: Device failure to respond to IIC. In the event of one of these situations arising the software will first try to release the bus if busy (Failure to do so will report with a continuous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the LED (Series of flashes which must be counted).

Flash Timing Example : e.g. error number 3

SiBy LED

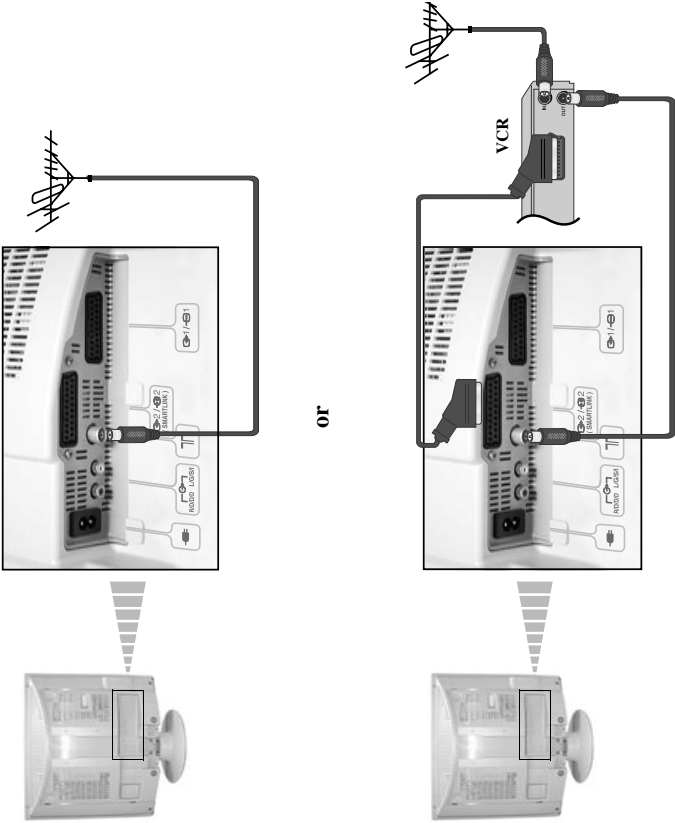


LED Error Code

LED ERROR CODE	ERROR DESCRIPTION
02	A Board Error
03	B Board Error
04	Panel Error
05	EEPROM Error
06	IIC Bus Error
09	Tuner Error
10	Sound Processor Error
11	Panel TV-SVP Error
12	CXA2163 Error
13	Port Expander 1 Error
14	Port Expander 2 Error

SECTION 1 GENERAL

Connecting the Aerial and VCR

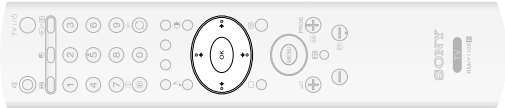


⚠ Make sure to connect the aerial before the Scart.

ℹ For more details regarding VCR connection, refer to "Connecting Equipment to the TV" on page 36.

First Time Operation
Switching On the TV and Automatically Tuning

ℹ The first time you switch on your TV, a sequence of menu screens appear on the TV enabling you to: 1) choose the language of the menu screen 2) choose the country in which you are going to operate the TV, 3) search and store all available channels (TV Broadcast) and 4) change the order in which the channels (TV Broadcast) appear on the screen. However, if you need to change any of these settings at a later date, you can do that by selecting the appropriate option in the ⚙ (Set Up menu) or by pressing and holding the Auto Start Up button on the top of TV set for more than three seconds, see page 17.



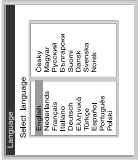
1 Connect the TV plug to the mains socket (220-240V AC, 50Hz).



2 The first time that the TV set is connected, it is usually turned on. If the TV is off, press the on/off button to turn on the TV. The first time you switch on the TV, a **Language** menu appears automatically on the TV screen.



3 Press the , , , or buttons on the remote control to select your language, then press the **OK** button to confirm your selection. From now on all the menus will appear in your chosen language.



4 The **Country** menu appears automatically. Press the or button to select the country in which you are using the TV. Press the **OK** button to confirm your selection.

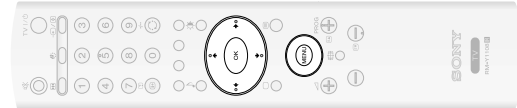


- If the country in which you want to use the TV set does not appear in the list, select “.” instead of a country.
- To avoid wrong teletext characters for Cyrillic languages we recommend selecting Russia if your own country does not appear in the list.

TV Functions

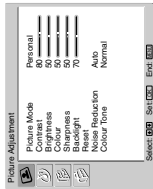
Introducing and Using the Menu System

1 Your TV set uses an On-Screen menu system to guide you through the operations. Use the following buttons on the Remote Control to operate the menu system:



1 To switch on the menu screens:

Press the **MENU** button to switch the first level menu on.



2 To navigate through the menus:

- To highlight and select the desired menu or option, press **↓** or **↑**.
- To enter the selected menu or option, press **→**.
- To return to the last menu or option, press **←**.
- To alter the settings of your selected option, press **↔** or **↔**.
- To confirm and store your selection, press **OK**.

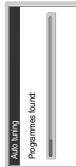
3 To switch off the menu screens:

Press the **MENU** button to remove the menu from the screen.

5 The **Auto Tuning** menu appears on the screen. Press the **OK** button to select **Yes**.



6 The TV starts to automatically search and store all available broadcast channels for you.

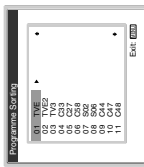


A This procedure could take some minutes. Please be patient and do not press any buttons, otherwise automatic tuning will not be completed.

A If no channels were found during the auto tune process, a message appears automatically on the screen asking you to connect the aerial. Check the aerial connection (refer to page 20). Press the **OK** button to restart the auto tuning process.



7 After all available channels are captured and stored, the **Programme Sorting** menu automatically appears on the screen enabling you to change the order in which the channels are stored.



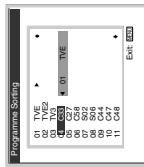
a) If you wish to keep the broadcast channels in the tuned order, go to step 8.

b) If you wish to store the channels in a different order:

1 Press the **↓** or **↑** button to select the programme number with the channel (TV Broadcast) you wish to move. Press the **→** button.

2 Press the **↓** or **↑** button to select the new programme number position for your selected channel (TV Broadcast). Press the **OK** button to store.

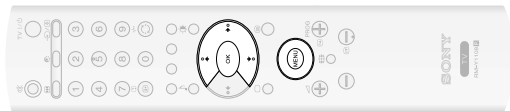
i The selected channel now moves to its new programme position and the other channels move accordingly.



3 Repeat steps b)1 and b)2 if you wish to change the order of the other channels.

8 Press the **MENU** button to remove the menu from the screen

👍 Your TV set is now ready for use



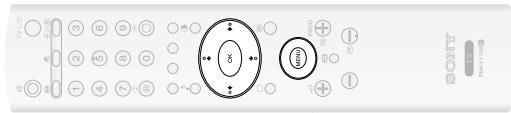
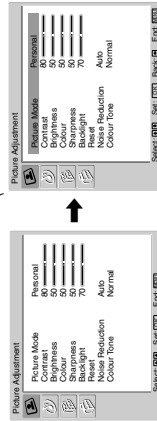
The Picture Adjustment Menu

 The "Picture Adjustment" menu allows you to alter the picture settings.



To do this:

Press the **MENU** button and then press **OK** to enter this menu. Next, press **▼** or **▲** to select the desired option and press **OK**. Finally, read below how to operate into each option.



Picture Mode This option allows you to customise the picture mode based on the programme you are watching. After selecting this option press **OK**. Next, press repeatedly **▼** or **▲** to select:

- Live** (for live broadcast programmes, DVD and Digital Set Top Box receivers).
- Personal** (for individual settings).
- Movie** (for films).

Once you have selected your desired option, press **OK** to store.

 "Brightness", "Colour", "Sharpness" and "Backlight" level of "Live" and "Movie" mode are fixed on the factory to get the best picture quality.

Contrast Press **◀** or **▶** to reduce or enhance picture contrast. Next, press **OK** to store.

Brightness Press **◀** or **▶** to darken or brighten the picture. Next, press **OK** to store.

 This option only appears and can only be adjusted if "Picture Mode" is set to "Personal".

Colour Press **◀** or **▶** to decrease or to increase color intensity. Next press **OK** to store.

 This option only appears and can only be adjusted if "Picture Mode" is set to "Personal".

Hue Press **◀** or **▶** to decrease or to increase the green tones. Next press **OK** to store.

 This option only appears for NTSC signal (e.g. USA video tapes).

Sharpness Press **◀** or **▶** to soften or to sharpen the picture. Next press **OK** to store.

 This option only appears and can only be adjusted if "Picture Mode" is set to "Personal".

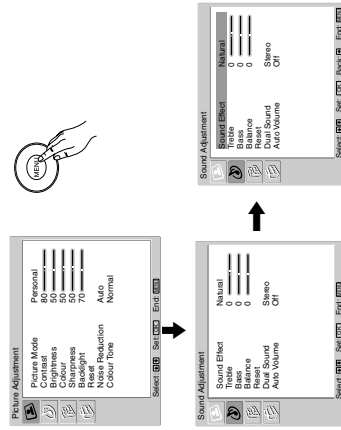
Backlight Press **◀** or **▶** to darken or brighten the backlight.

 This option only appears and can only be adjusted if "Picture Mode" is set to "Personal".

continued...

Reset	Press OK to reset the picture to the factory preset levels.
Noise Reduction	This option is set to Auto to automatically reduce the snowy picture visible in the weak broadcast signal. However, it can be modified. After selecting this option press ▶ . Next, press ▼ or ▲ to select Off . Finally, press OK to store.
Colour Tone	This option allows you to alter the tint of the picture. After selecting this option press ▶ . Next, press repeatedly ▼ or ▲ to select: Warm (gives the white colours a red tint), Normal (gives the white colours a neutral tint), Cool (gives the white colours a blue tint). Finally press OK to store.

The Sound Adjustment Menu



1 The "Sound Adjustment" menu allows you to alter the sound settings.

To do this:

Press the **MENU** button and press **↓** to select **2**, then press **OK** to enter this menu. Next, press **↓** or **↑** to select the desired option and press **OK**. Finally, read below how to operate into each option.

Sound Effect

This option allows you to customise the sound effect. After selecting this option press **OK**. Next, press repeatedly **↓** or **↑** to select:

- Natural** Enhances clarity, detail and presence of sound by using "BBE High Definition Sound system"*.
- Dynamic** "BBE High Definition Sound system"* intensifies clarity and presence of sound for better intelligibility and musical realism.
- Off** Flat response.

Once you have selected your desired option, press **OK** to store. This function has no effect on headphones sound.

Treble

Press **←** or **→** to decrease or to increase higher-frequency sounds. Next, press **OK** to store.

Bass

Press **←** or **→** to decrease or to increase the lower-frequency sounds. Next, press **OK** to store.

Balance

Press **←** or **→** to emphasise the left or the right speaker. Next, press **OK** to store.

Reset

Press **OK** to reset the sound to the factory preset levels.

Dual Sound

- Press **→**. Next:
- For a Stereo broadcast: Press **↓** or **↑** to select **Stereo** or **Mono**. Next press **OK** to store.
- For a bilingual broadcast: Press **↓** or **↑** to select **Mono** (for mono channel if available), **A** (for channel 1) or **B** (for channel 2). Next press **OK** to store.

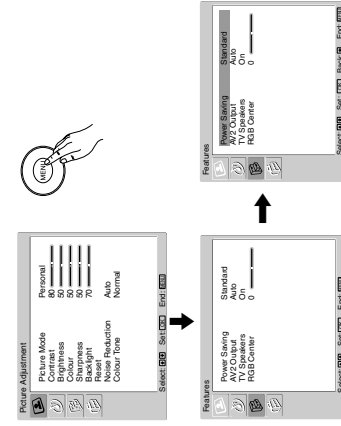
Auto Volume

Press **→**. Next press **↓** or **↑** to select **On** (the volume level of the channels will stay the same, independent of the broadcast signal, e.g. in the case of advertisements) or **Off** (the volume level changes according to the broadcast signal). Next press **OK** to store.

This function has no effect on headphones sound.

1 * The "BBE High Definition Sound system" is manufactured by Sony Corporation under license from BBE Sound, Inc. It is covered by U.S. Patent No. 4,638,258 and No. 4,482,866. The word "BBE" and BBE Symbol are trademarks of BBE Sound, Inc.

The Features Menu



1 The "Features" menu allows you to alter various settings of the TV.

To do this:

Press the **MENU** button and press **↓** twice to select **3**, then press **OK** to enter this menu. Next, press **↓** or **↑** to select the desired option and press **OK**. Finally, read below how to operate into each option.

POWER SAVING

This option allows you to reduce the power consumption of this TV.

To do this:

After selecting the option, press **OK**. Then, press **↓** or **↑** to select **Reduce**. Next, press **OK** to store.

AV2 OUTPUT

The "AV2 Output" option allows you to select the source to be output from the Scart connector **2/3** so that you can record from this Scart the signal coming from the TV or the signal that is being viewed on the TV.

1 If your VCR or DVD recorder supports SmartLink, this procedure is not necessary.

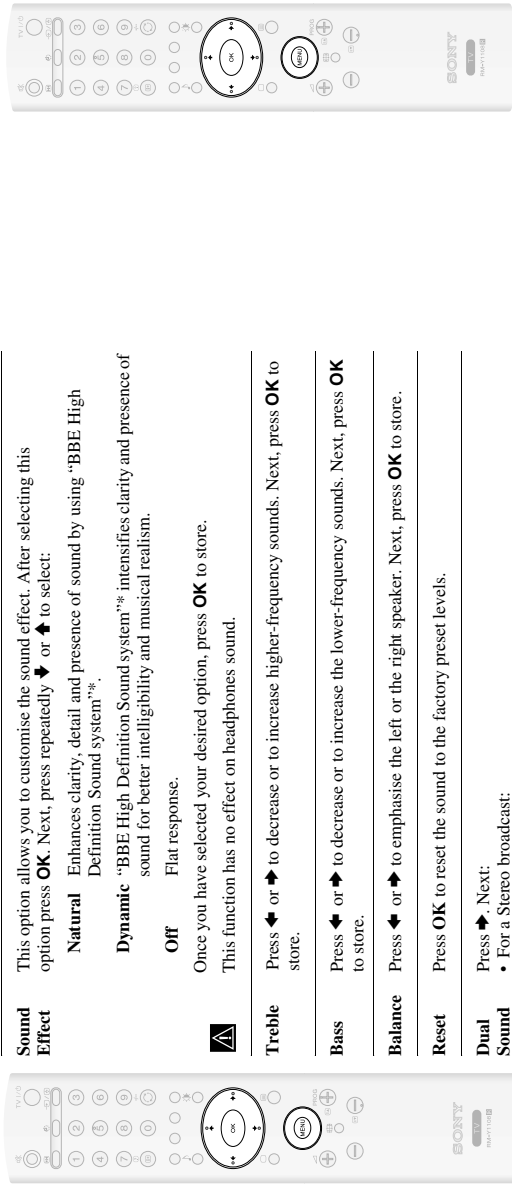
To do this:

Once you have entered into the "Features" menu as it is explained in the previous page and after selecting the option, press **OK**. Then press **↓** or **↑** to select the desired output signal:

- TV** to output the aerial source.
- AUTO** to output the signal that is being viewed on the TV.

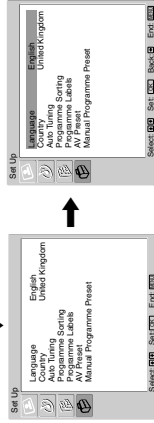
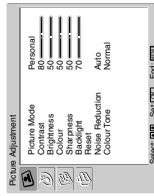
1 If you select "AUTO", the output signal will always be the same one that is displayed on the screen.

- If you have connected a decoder to the Scart **2/3** or to a VCR connected to this Scart, please remember to change back the "AV2 Output" to "TV" for correct unscrambling. Alternatively, set the "Decoder" option in the "Manual Programme Preset" menu to "On" for the scrambled programme. For more details refer to page 33.



The Set Up Menu

1 The "Set Up" menu allows you to alter various options on this TV.



To do this:
Press the **MENU** button and press **↵** three times to select **⏏**, then press **OK** to enter this menu. Next, press **↵** or **⬅** to select the desired option and press **OK**. Finally, read below how to operate into each option.

LANGUAGE

This option allows you to select the language that menus are displayed in.

To do this:

After selecting the option, press **OK** and then proceed in the same way as in step 3 of the section "Switching On the TV and Automatically Tuning" on page 22.

COUNTRY

This option allows you to select the country in which you wish to operate the TV set.

To do this:

After selecting the option, press **OK** and then proceed in the same way as in step 4 of the section "Switching On the TV and Automatically Tuning" on page 22.

AUTO TUNING

This option allows you to automatically search for and store all available TV channels.

To do this:

After selecting the option, press **OK** and then proceed in the same way as in the steps 5 and 6 of the section "Switching On the TV and Automatically Tuning" on page 23.

PROGRAMME SORTING

This option allows you to change the order in which the channels (TV Broadcast) appear on the screen.

To do this:

After selecting the option, press **OK** and then proceed in the same way as in the step 7 of the section "Switching On the TV and Automatically Tuning" on page 23.

TV SPEAKERS

This option allows you to turn off the TV speakers e.g. to listen to the sound through external audio equipment connected to the TV.

To do this:

Press the **⬇** or **⬆** buttons to select one of the following options, then press the **OK** button.

On

The sound is output from the TV speakers.

One Time Off

The TV speakers are temporarily turned off allowing you to listen to the sound from external audio equipment.

1

The "TV Speakers" option automatically returns to "On" when the TV set is switched off.

Permanent Off

The TV speakers are permanently turned off allowing you to listen to the sound from external audio equipment.

A

To turn on the TV speakers again, change the "TV Speakers" option to "On".

RGB CENTER

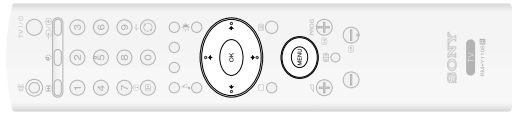
A

This option is only available if an RGB source has been connected to the Scart connector **⏏ I/⏏** on the rear of TV.

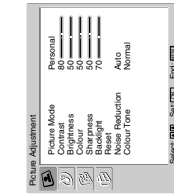
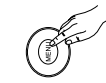
When viewing an RGB signal, the picture may need some adjusting. This option allows you to adjust the horizontal picture position so that the picture is in the middle of the screen.

To do this:

Once you have entered the "Features" menu as it is explained in on page 28 and while watching an RGB source select the "RGB Center" option and press **OK**. Then press **⬅** or **➡** to adjust the centre of the picture between -5 and +5. Finally press **OK** to confirm and store.



The Manual Programme Preset Menu



To do this:
The "Manual Programme Preset" option in the "Set Up" menu allows you to manually tune individual channels.

Press the **MENU** button and press **↕** three times to select **Set Up**, then press **OK** to enter the "Set Up" menu. Next, press **↕** or **↗** to select "Manual Programme Preset" and press **OK**. Finally, read below how to operate into each option.

The Manual Programme Preset option allows you to:

- Preset channels or the VCR channel one by one to the programme order of your choice.

To do this:

- Once you have entered the "Set Up" menu as it is explained on page 30 and after selecting the "Manual Programme Preset" option, press **OK**. Next with **Programme** option highlighted press **OK**. Press **↕** or **↗** to select which programme number you want to preset the channel on (for VCR, select programme number "0"). Then press **↕**.
- The following option is only available depending on the country you have selected in the "Country" menu.
After selecting the **System** option, press **OK**. Then press **↕** or **↗** to select the TV Broadcast system (**B/G** for western European countries, **D/K** for eastern European countries, **L** for France or **I** for United Kingdom). Then press **↕**.
- After selecting the **Channel** option, press **OK**. Next press **↕** or **↗** to select the channel tuning ("C" for terrestrial channels or "S" for cable channels). Then press the number buttons to enter directly the channel number of the TV Broadcast or the channel of the VCR signal. If you do not know the channel number, press **↕** and **↗** or **↗** to search for it. When you have tuned the desired channel, press **OK** twice to store.

Repeat all the above steps to tune and store more channels.

- Label a channel using up to five characters.

To do this:

Once you have entered the "Set Up" menu as it is explained on page 30 and after selecting the "Manual Programme Preset" option, press **OK**. Next with the **Programme** option, highlighted press the **PROG +/-** button to select the programme number with the channel you wish to name. When the programme you want to name appears on the screen, press **↕** or **↗** to select the **Label** option and press **OK**. Then, with the first element highlighted, press **↕**, **↗**, **↖**, or **↘** to select the letter, next press **OK**. When you have finished, press **↕**, **↗**, or **↘** to select the word "End" on the screen and finally press **OK** to turn off the menu from the screen. Finally press **OK** to store.

- To correct a letter, select "←" on the screen to go back and press **OK**.
- For a blank, select "□" on the screen and press **OK**.

PROGRAMME LABELS

This option allows you to name a channel using up to five characters (letters or numbers).

To do this:

- Once you have entered the "Set Up" menu as it is explained in the previous page and after selecting this option, press **OK**, then press **↕** or **↗** to select the programme number with the channel you wish to name. Next press **OK**.
- With the first element of the **Label** column highlighted, press **OK** and **↕**, **↗**, **↖**, or **↘** to select the letter, next press **OK**. When you have finished, press **↕**, **↗**, **↖**, or **↘** to select the word "End" on the screen and finally press **OK** to turn off the menu from the screen.

- To correct a letter, select "←" on the screen to go back and press **OK**.
- For a blank, select "□" on the screen and press **OK**.

AV PRESET

This option allows you to:

- Designate a name to the external equipment you have connected to the input sockets of the TV set.

To do this:

- Once you have entered the "Set Up" menu as it is explained in the previous page and after selecting this option, press **OK**, then press **↕** or **↗** to select the input source you wish to name: **AV1** and **AV2** for the rear Scarts and **AV3** for side connectors. Next press **OK** twice.
- A label automatically appears in the label column:
 - If you want to use one of the predefined labels, press **↕** or **↗** to select the desired label and finally press **OK**. The total predefined labels are: **VIDEO**, **DVD**, **CABLE**, **GAME**, **CAM** (camcorder) or **SAT** (satellite).
 - If you want to set a different label, select **Edit** and press **OK**. Then, with the first element highlighted, press **↕**, **↗**, **↖**, or **↘** to select the letter, next press **OK**. When you have finished, press **↕**, **↗**, **↖**, or **↘** to select the word "End" on the screen and finally press **OK** to turn off the menu from the screen.

- To correct the letter, select "←" on the screen to go back and press **OK**.
- For a blank, select "□" on the screen and press **OK**.

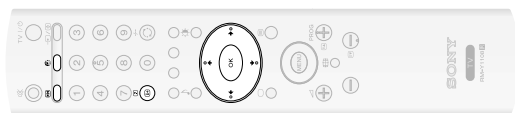
- Change the input sound level of the optional equipment connected.

To do this:

Once you have entered the "Set Up" menu as it is explained in the previous page and after selecting this option press **OK**, then press **↕** or **↗** to select the input source you want to alter the input sound level: **AV1** and **AV2** for the rear Scarts and **AV3** for side connectors. Next press twice **↗** to highlight the **Sound Offset** column. Finally press **OK** and **↕** or **↗** to alter the input sound level between -9 and +9.

continued...

Other Functions



- c) Fine tune the broadcast reception. Normally the automatic fine tuning (AFT) will give the best possible picture, however you can manually fine tune the TV to obtain a better picture reception in case the picture is distorted.

To do this:

While watching the channel (TV Broadcast) you wish to fine tune, and once you have entered the "Set Up" menu as it is explained on page 30 and after selecting the "Manual Programme" option, press **OK**. Then press $\blacktriangledown$ or $\blacktriangle$ to select the **AFT** option and press $\blacktriangleright$. Next press $\blacktriangledown$ or $\blacktriangle$ to adjust the fine tuning between -15 and +15. Finally press **OK** twice to store.

- d) Improve the sound for individual channels in the case of distortion in mono broadcasts. (Not available when "System" is set to "L".)
Sometimes a non standard broadcast signal can cause sound distortion or intermittent sound muting when watching mono programmes. The **Audio Filter** option allows you to reduce this effect.

❶ If you do not experience any sound distortion, we recommend that you leave the **Audio Filter** option set to the default setting of "Off".

To do this:

Once you have entered the "Set Up" menu as it is explained on page 30 and after selecting the "Manual Programme Preset" option, press **OK**. Next, press $\blacktriangledown$ or $\blacktriangle$ to select the **Audio Filter** option and press $\blacktriangleright$. Next press $\blacktriangledown$ or $\blacktriangle$ to select **Off**, **Low** or **High**.

❷ You can not receive stereo or dual sound when "Low" or "High" is selected.

- e) Skip any unwanted programme numbers when they are selected with the **PROG +/-** buttons.

To do this:

Once you have entered the "Set Up" menu as it is explained on page 30 and after selecting the "Manual Programme Preset" option, press **OK**. Next with the **Programme** option highlighted, press the **PROG +/-** button to select the programme number you want to skip. When the programme you want to skip appears on the screen, press $\blacktriangledown$ or $\blacktriangle$ to select the **Skip** option and press $\blacktriangleright$. Next press $\blacktriangledown$ or $\blacktriangle$ to select **On**. Finally press **OK** twice to confirm and store.

To cancel this function afterwards, select "Off" instead of "On" in the step above.

- f) View and record scrambled channels (e.g. from a pay TV decoder) when using a decoder connected to Scart C-2/3 directly or through a VCR.

❶

This option is only available depending on the country you have selected in the "Country" menu.

To do this:

Once you have entered the "Set Up" menu as it is explained on page 30 and after selecting the "Manual Programme Preset" option, press **OK**. Next press $\blacktriangledown$ or $\blacktriangle$ to select the **Decoder** option and press $\blacktriangleright$. Next press $\blacktriangledown$ or $\blacktriangle$ to select **On**. Finally press **OK** twice to confirm and store.

To cancel this function afterwards, select "Off" instead of "On" in the step above.

Sleep Timer

This function allows you to set the TV to switch itself automatically to standby mode after a specified time period. The following time periods can be selected: 30, 60, 90 and 120 minutes.

To do this:

Press the ⏻ button on the remote control repeatedly until the desired time period appears on the screen.

When the Sleep Timer feature is on, the ⏻ (Standby/Sleep) indicator on the TV lights up in red.

To cancel the Sleep Timer feature:

Press the ⏻ button on the remote control repeatedly until "Off" appears on the screen.

- If you switch off the TV and switch it on again, the Sleep Timer feature is reset to "Off".
- Press the ⏻ button on the remote control to display the time remaining before the TV switches to standby mode.
- The message "Sleep Timer will end soon. Power will be turned off." Appears on the screen 1 minute before the TV switches to the standby mode.

Picture Freeze

This function allows you to freeze the TV picture (e.g. to make a note of a telephone number or recipe).

To do this:

Press the ⏻ button on the remote control to freeze the picture. A window is displayed in the bottom left of the screen showing the currently selected channel. Press the ⏻ button again to remove the window. Press the ⏻ button again to cancel the Picture Freeze and return to normal TV mode.

Adjusting the position of the Picture Freeze window

The position of the window displaying the currently selected channel can be adjusted.

To do this

With the TV in Picture Freeze mode, press the $\blacktriangle$, $\blacktriangledown$, $\blacktriangleleft$ or $\blacktriangleright$ buttons to adjust the position of the window on the TV screen.

Teletext



Teletext is an information service transmitted by most TV stations. The index page of the Teletext service (usually page 100) gives you information on how to use the service. To operate Teletext, use the remote control buttons as indicated below.

Make sure you use a channel (TV Broadcast) with a strong signal, otherwise Teletext errors may occur.

To switch on Teletext

After selecting the TV channel which carries the Teletext service you want to view, press **[Teletext]**.

Each time you press **[Teletext]**, the screen changes cyclically as follows:

Teletext mode **[Teletext]** Teletext Superimpose mode **→** TV mode **→** Teletext mode **→** (repeat).

To select a Teletext page

Input three digits for the page number, using the number buttons.

- If you make a mistake, retype the correct page number.
- If the counter on the screen continues searching, it is because this page is not available. In this case, input another page number.

To access the next or preceding page

Press **PROG +** (**[Right Arrow]**) or **PROG -** (**[Left Arrow]**).

To freeze a Teletext page

Some Teletext pages have sub-pages which follow on automatically. To stop them, press **[Freeze]**. Press it again to cancel the freeze.

To reveal concealed information (e.g. answers to a quiz)

Press **[Reveal]**. Press it again to conceal the information.

To change brightness of Teletext:

Whilst you are viewing Teletext, press **[Brightness]** repeatedly to choose between four different options of brightness.

To switch off Teletext

Press **[Off]**.

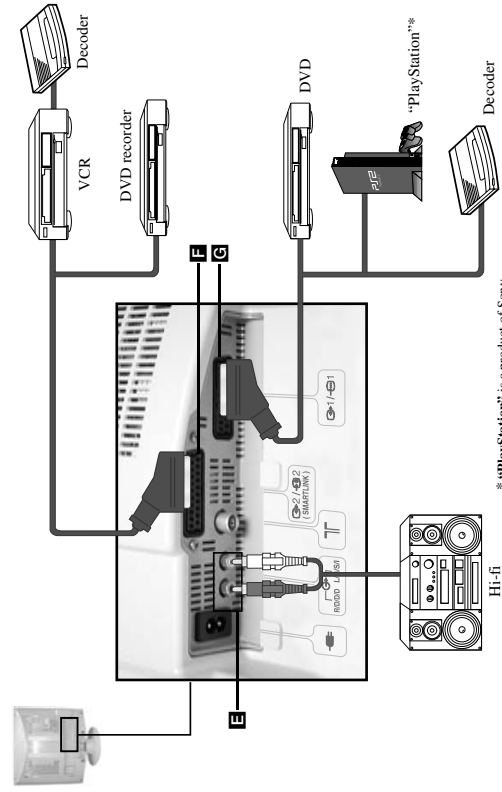
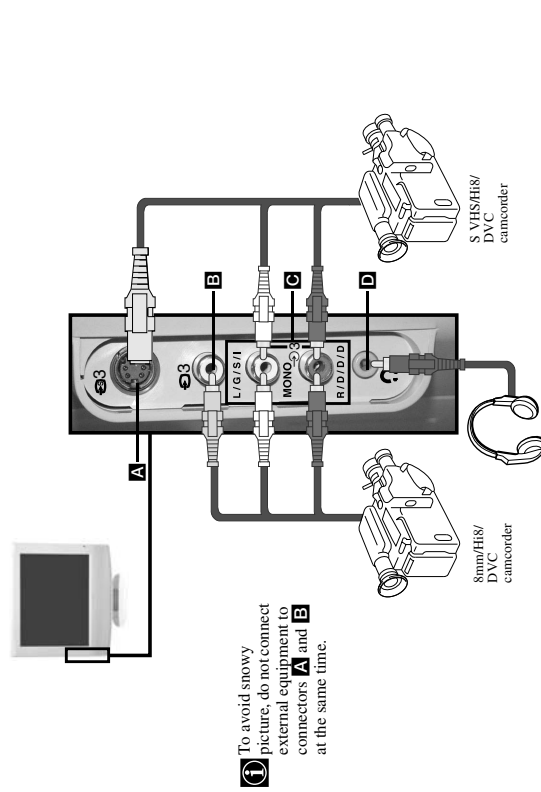
- 1 If wrong Teletext characters appear for Cyrillic languages, we recommend you set the "Language" option in the "Set Up" menu to "Russia" if your country does not appear in the list. For details, refer to page 30.

Fastext

- 1 The Fastext service lets you access pages with one push of a button. Whilst you are in the Teletext mode and Fastext is broadcast, a colour coded menu appears at the bottom of the Teletext page. Press the colour button (red, green, yellow or blue) to access the corresponding page.

Additional Information Connecting Equipment to the TV

- Using the following instructions you can connect a wide range of optional equipment to your TV set.
- Connecting cables are not supplied.



* "PlayStation" is a product of Sony Computer Entertainment, Inc.
* "PlayStation" is a trademark of Sony Computer Entertainment, Inc.

Viewing pictures from equipment connected to the TV

- 1 Connect your equipment to the designated TV socket, as indicated on page 36.
 - 2 Switch on the connected equipment.
 - 3 To watch the picture from the connected equipment, press the  button repeatedly until the correct input symbol appears on the screen.
- | Symbol | Input Signals |
|---|---|
|  | • Audio / video input signal through the Scart connector G |
|  | • RGB input signal through the Scart connector G . This symbol appears only if an RGB source has been connected. |
|  | • Audio/video input signal through the Scart connector F |
|  | • S Video Input signal through the Scart connector F . This symbol appears only if an S Video source has been connected. |
|  | • Video input signal through the phono socket B and Audio input signal through C |
|  | • S Video Input signal through the side S Video input jack A and Audio signal through G . This symbol appears only if an S Video source has been connected. |
- 4 Press the  button on the remote control to return to the normal TV picture.

For Mono Equipment

Connect the phono plug to the L/G/S/I socket on the side of the TV and select  or  input signal using the instructions above. Next, refer to the "Sound Adjustment" section of this manual and set "Dual Sound" option to "A" on the sound menu screen (see page 27).

Connecting a VCR

To connect a VCR, please refer to the section "Connecting the aerial and VCR" of this instruction manual on page 20.

Connecting a VCR or a DVD recorder that supports SmartLink

 SmartLink is a direct link between the TV set and a SmartLink compatible VCR/DVD recorder. For more information on SmartLink, please refer to the instruction manual of your SmartLink VCR/DVD recorder.

If you use a VCR or a DVD recorder that supports SmartLink, please connect the VCR or the DVD recorder to the TV using a Scart lead to the Scart  **F**

If you have connected a decoder or a Set Top Box to the Scart **F** or through a VCR connected to this Scart

Select the "Manual Programme Preset" option in the "Set Up" menu and after entering in the "Decoder**" option, select "On" (refer to page 33). Repeat this option for each scrambled signal.

**This option is only available depending on the country you have selected in the "Country" menu.

Connecting Audio Equipment to the TV

To listen to the sound from TV on Hi-fi equipment.

Connect your audio equipment to the audio output sockets  if you wish to amplify the audio output from the TV. Next, using the menu system, select the "Features" menu and set the "TV Speakers" to "Permanent Off" (see page 29).

-  The volume of the external speakers can be altered by pressing the volume buttons on the TV remote control. The treble and bass setting can also be altered through the "Sound Adjustment" menu (see page 27).

Technical Specifications

Panel System:
LCD (Liquid Crystal Display) Panel

TV System:
(Depending on the Country/region selection)
B/G/H, D/K, L, I

Colour System:
PAL, SECAM
NTSC 3.58, 4.43 (Only Video In)

Aerial:
75 ohm external terminal for VHF/UHF

Channel Coverage:
(Depending on the Country/region selection)
VHF: E2-E12
UHF: E21-E69
CATV: S1-S20
HYPER: S21-S41
D/K: R1-R12, R21-R69
L: F2-F10, B-Q, F21-F69
I: UHF B21-B69

Screen Size:
20 Inches (approx. 51 cm, measured diagonally)

Display Resolution:
640 dots (horizontal) x 480 lines (vertical)

Power Requirement:
220-240V AC, 50/60 Hz

Power Consumption:
65 W

Standby Power Consumption:
0.5 W

Sound Output:
3 W

Dimensions (w x h x d):
With stand, approx. 504 x 509 x 250 mm.
Without stand, approx. 504 x 467 x 111 mm.

Weight:
With stand, approx. 9 Kg.
Without stand, approx. 7 Kg.

Rear Terminals:

• **AV1:**   (CENELEC standard)
21-pin Scart connector (CENELEC standard)
including audio/video input, RGB input, TV audio/
video output.

• **AV2:**   (SMARTLINK)
21-pin Scart connector (CENELEC standard)
including audio/video input, S video input, selecta-
ble audio/video output and Smartlink interface.

•  Audio Outputs (left/right) – phono jacks.

•  Aerial connector (RF In)

Side Terminals:

• **AV3:**
 3 S video input (4-pin mini DIN)

 3 Video input (phono jack)

 3 Audio input (phono jacks)

•  headphones jack

Accessories supplied:

One Remote Control (RM-Y1108),
Two Size AA batteries (R6 type),
One Mains lead (Type C-6)
One Mains lead (Type BF)

Other Features:

- Teletext, Fastext, TOPtext (depending on availability)
- Sleep Timer
- Picture Freeze
- Smartlink (Direct link between your TV and a compatible VCR or DVD recorder. For more information on Smartlink, please refer to the instruction manual of your VCR or DVD recorder.)
- TV system autodetection

This TV is compatible with the VESA universal wall stand system.

Design and specifications are subject to change without notice.

This instruction manual has been printed on: Ecological Paper - Totally Chlorine Free 

Troubleshooting

 Here are some simple solutions to problems which may affect the picture and sound.

Problem	Possible solution
No picture	
No picture (screen is dark) and no sound.	• Check the aerial connection. • Connect the TV to the mains, and press the  power switch on the top side of the TV set. • If the  (standby) indicator is on, press TV /  on the remote control.
The TV turns off automatically. (The TV enters the standby mode.)	• Check if the Sleep Timer is activated (page 34).
No picture or no menu information from equipment connected to the Scart connector.	• Check that the optional equipment is on and press the  / . • Check the connection between the optional equipment and the TV.
Poor picture/Unstable picture	
Double images or ghosting.	• Check aerial/cable connections. • Check the aerial location and direction.
Only snow and noise appears on the screen.	• Check if the aerial is broken or bent. • Check if the aerial has reached the end of its serviceable life (3-5 years in normal use, 1-2 years at the seaside)
Dotted lines or stripes.	• Keep the TV away from electrical noise sources such as cars, motorcycles, or hair-dryers.
No colour on colour programmes.	• Using the menu system, select the "Picture Adjustment" menu and select "Reset" to return to the factory settings (page 26). • If you set the "Power Saving" function to "Reduce," picture colours may become dimmer (page 28).
Some tiny black points and/or bright points on the screen.	• The picture of the display is composed of pixels. Tiny black points and/or bright points (pixels) on the screen, do not indicate a malfunction.
The picture is too bright.	• Using the menu system, select the "Picture Adjustment" menu and select "Picture Mode." Then select the desired picture mode (page 25).
Picture (stripe) noise.	• Make sure that the aerial is connected. • Keep the aerial cable away from other connecting cords. • Do not use 300-ohm twin lead cables as interference may occur.

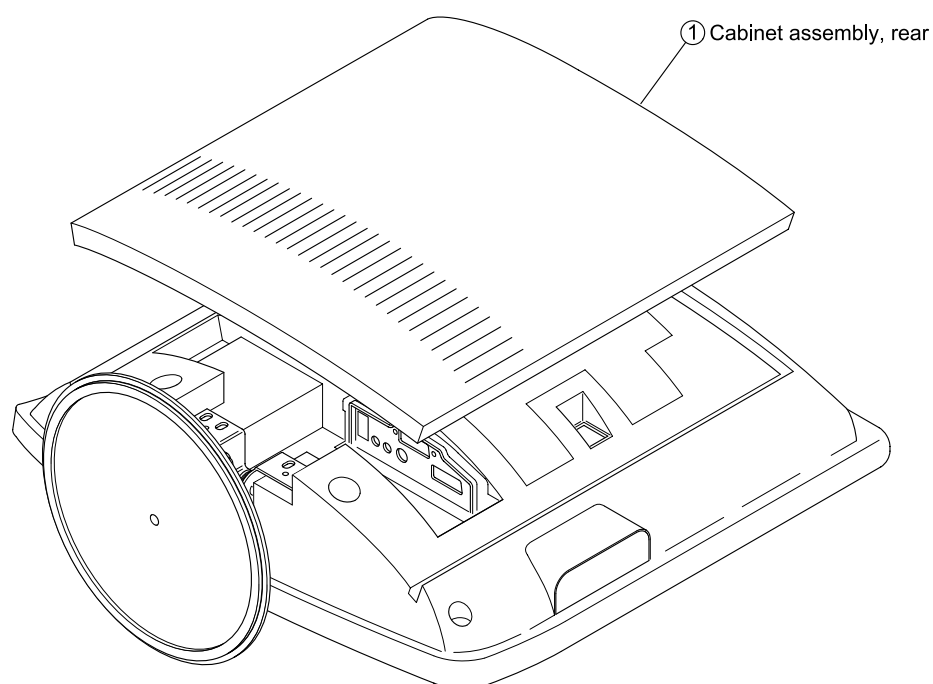
Problem	Possible solution
Strange sound The TV cabinet creaks.	Changes in room temperature sometimes causes the TV cabinet to expand or contract, which can make slight noises. This does not indicate a malfunction.
The TV buzzes.	There might be a surge sound when turning on the TV. This does not indicate a malfunction.
Remote Control Remote control does not function.	Replace the batteries.
The  (standby) or TV  (power on) indicators on the TV flashes	Contact your nearest Sony service centre.
 If you continue to experience problems, have your TV serviced by qualified personnel. Never open the casing yourself.	

Problem Stripe noise during playback/recording of a VCR. Poor or no picture (screen is dark), but good sound. Noisy picture when viewing a TV channel. Distorted picture when changing programmes or selecting teletext. Cannot operate the menu	Possible solution - Video head interference. Keep your VCR away from the TV. - Leave a space of 30 cm between your VCR and the TV set to avoid noise. - Avoid installing your VCR in front or at the side of the TV set. - Using the menu system, select the "Picture Adjustment" menu and select "Reset" to return to the factory settings (page 26). - Using the menu system, select the "Manual Programme Preset" option in the "Set Up" menu and adjust Fine Tuning (AFT) to obtain better picture reception (page 33). - Using the menu system, set the "Noise Reduction" option in the "Picture Adjustment" menu to reduce the noise in the picture (page 26). - Turn off any equipment connected to the Scart connector on the rear of the TV set. - If the item you want to select appears in a pale colour is because you cannot select it.
Wrong characters appear when viewing teletext	Using the menu system, enter the "Country" option in the "Set Up" menu and select the country in which you operate the TV set (page 30). For Cyrillic languages, we recommend that you select Russia if your own country does not appear in the list.
No sound/Noisy sound Good picture, no sound. Audio noise.	- Press the  +/- or  (mute) on the remote control. - Check that "TV Speakers" option is set to "On" in the "Features" menu (page 29). - Make sure that the aerial is connected. - Keep the aerial cable away from other connecting cables. - Do not use 300-ohm twin lead cables as interference may occur. - Communication problems may occur if the infrared communication equipment (e.g. infrared cordless headphones) is used near the TV. Please use headphones other than infrared cordless headphones, move the infrared transceiver away from the TV until the noise is eliminated, or move the transmitter and receiver of the infrared communication equipment closer together. - Using the menu system, select "Audio Filter" from the "Manual Programme Preset" menu. Next select "Low" or "High" (see page 33).
Unable to receive a stereo or dual sound broadcast	Check that the "Audio Filter" option in the "Manual Programme Preset" menu is set to "Off" (see page 33).

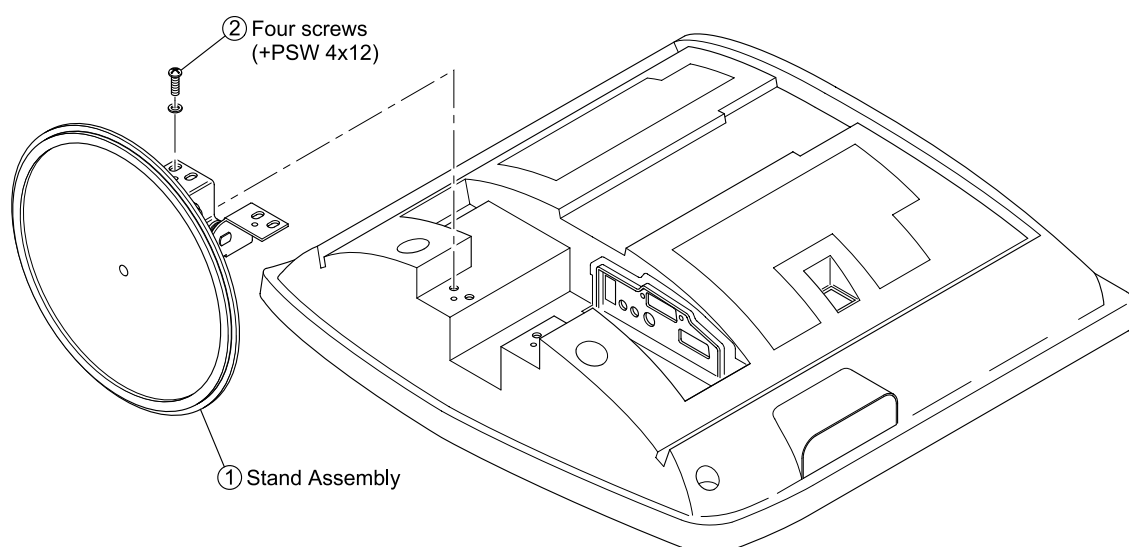
continued...

SECTION 2 DISASSEMBLY

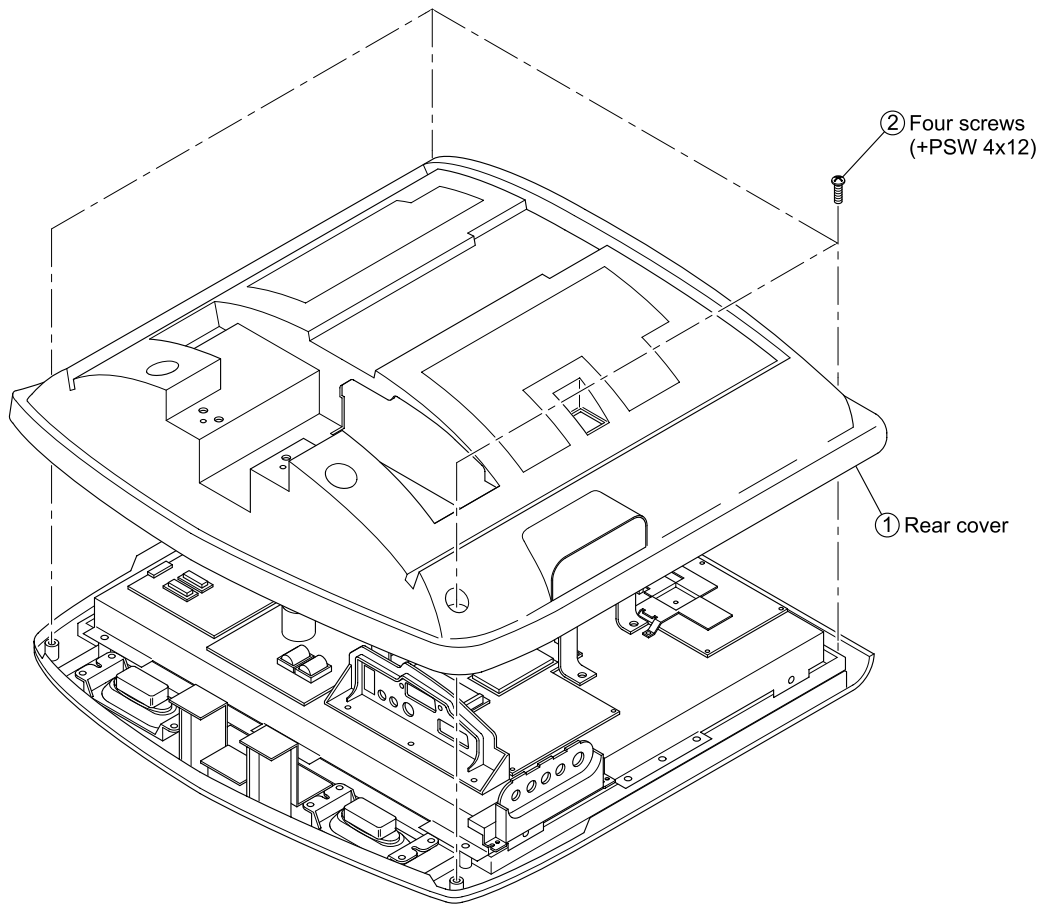
2-1. REAR CABINET ASSEMBLY REMOVAL



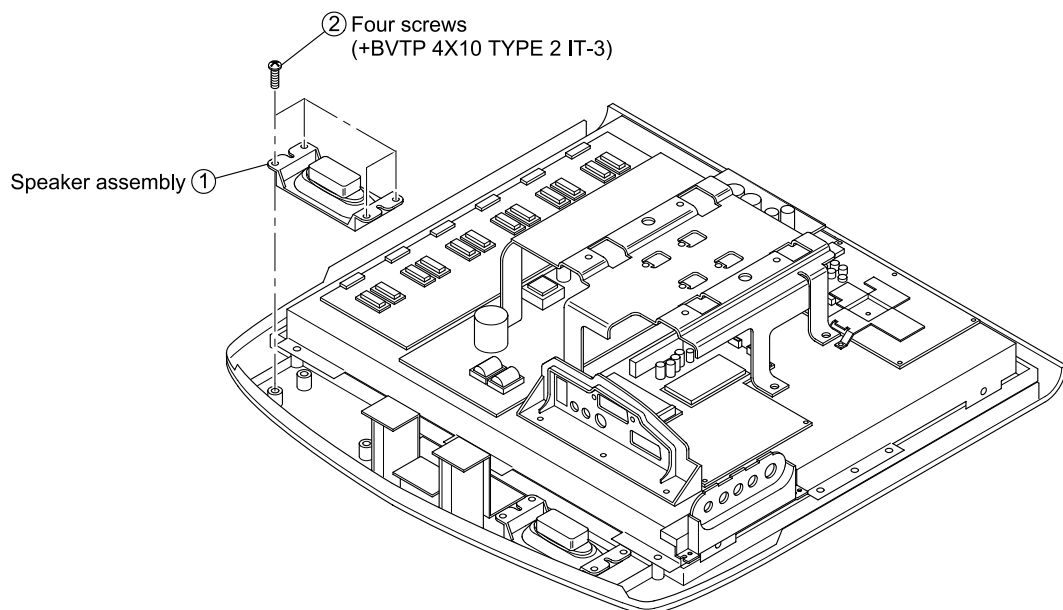
2-2. STAND REMOVAL



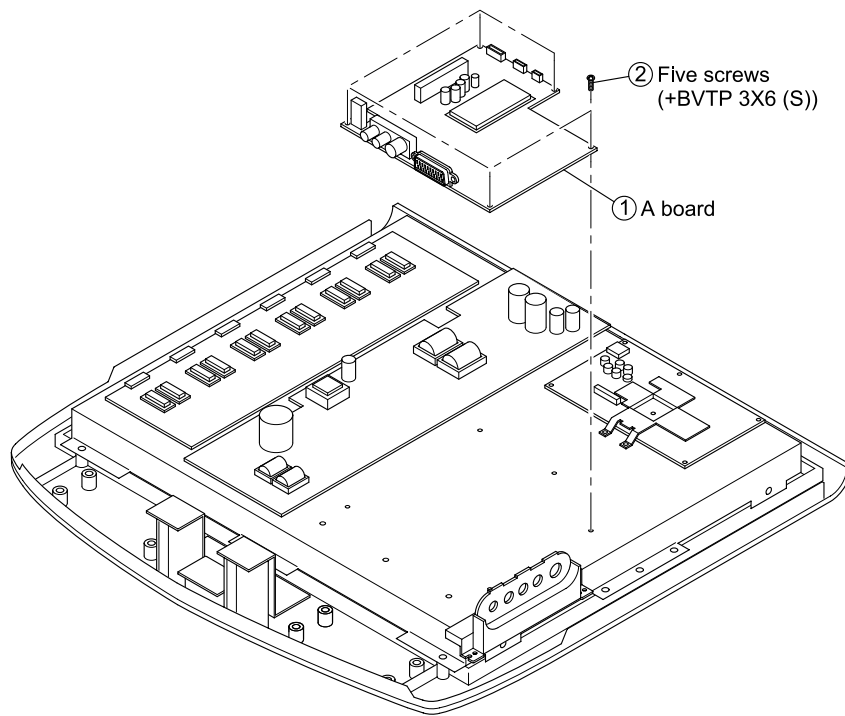
2-3. REAR COVER REMOVAL



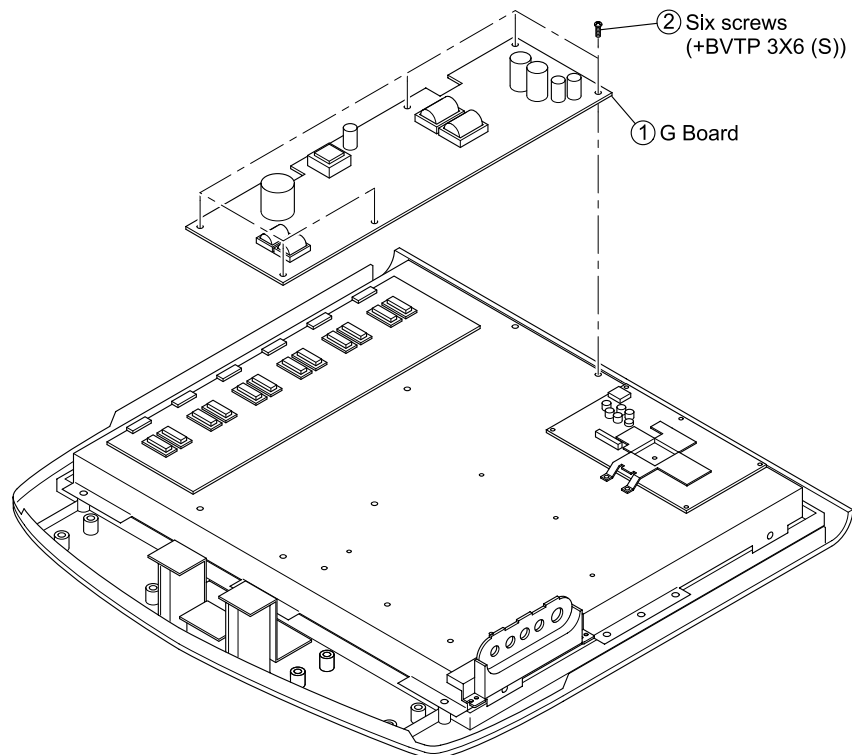
2-4. SPEAKER REMOVAL



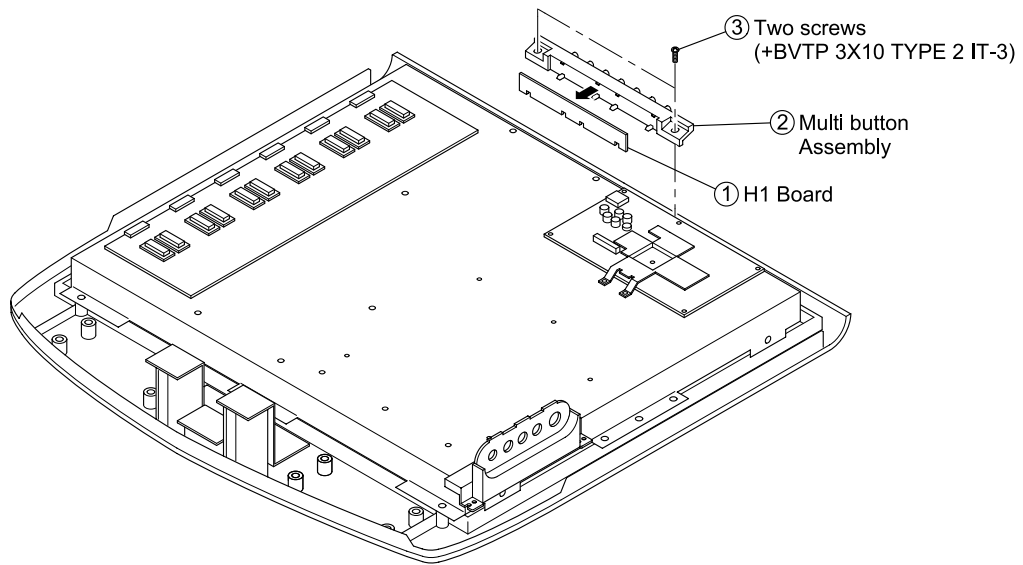
2-5. A BOARD REMOVAL



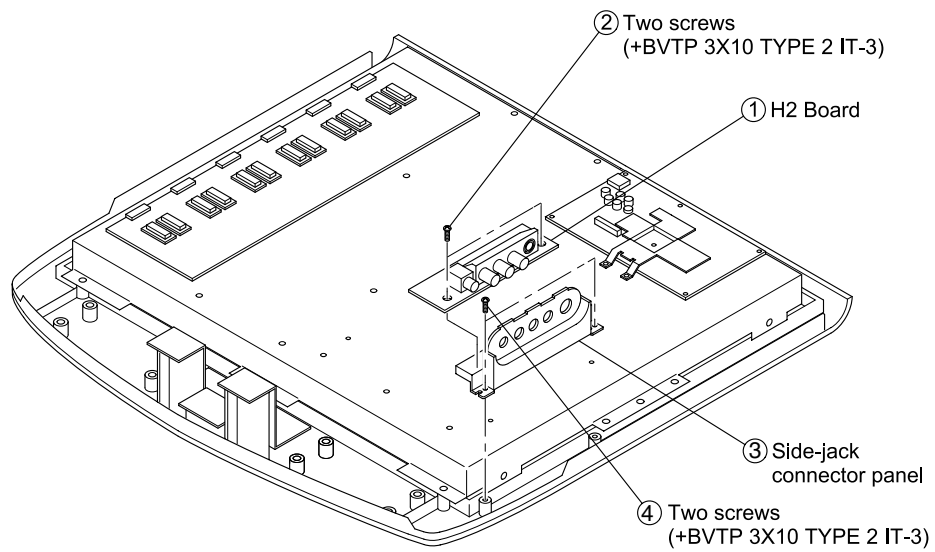
2-6. G BOARD REMOVAL



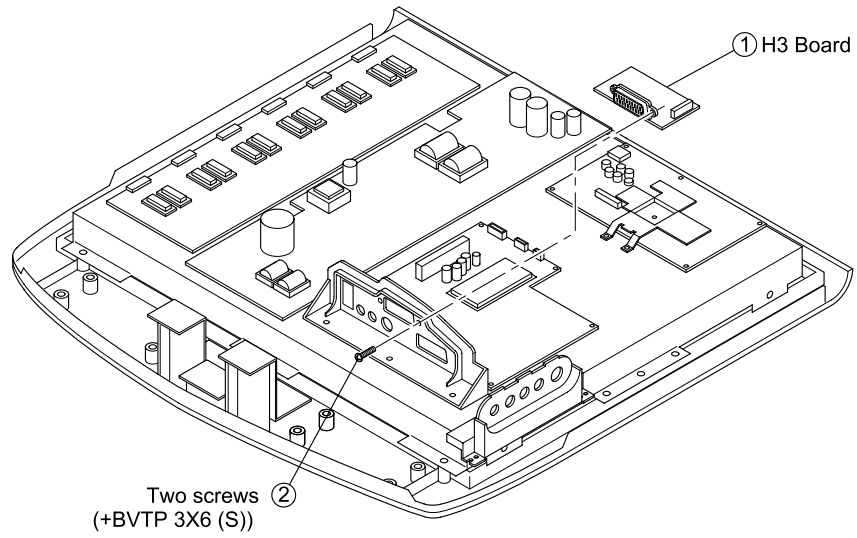
2-7. H1 BOARD REMOVAL



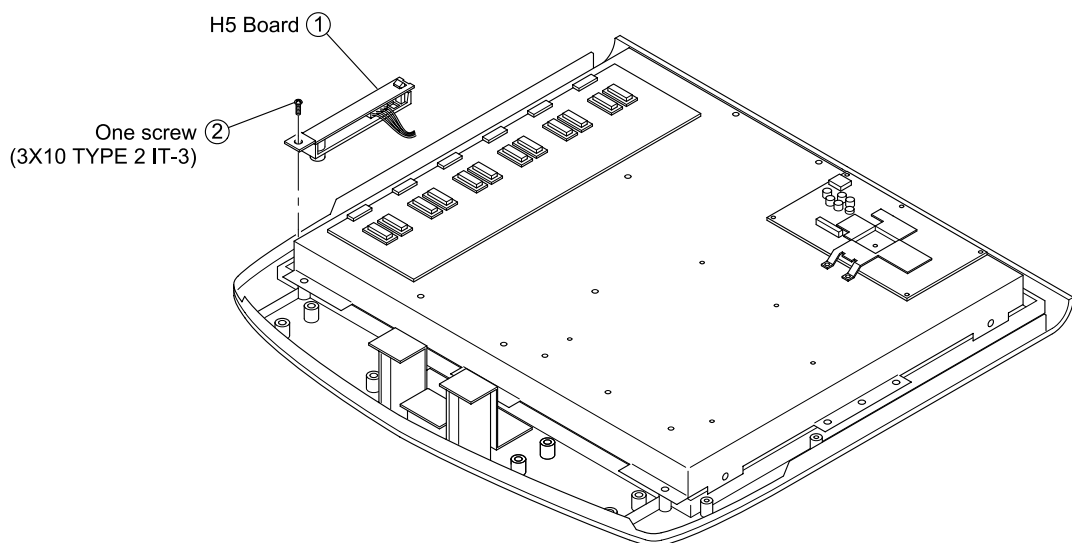
2-8. H2 BOARD REMOVAL



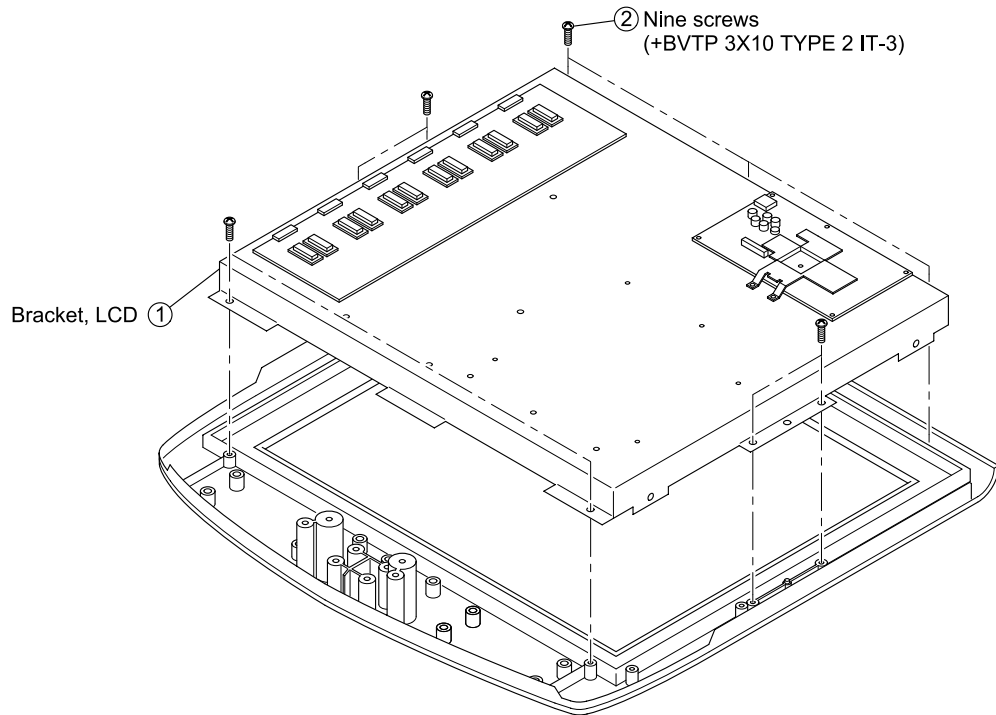
2-9. H3 BOARD REMOVAL



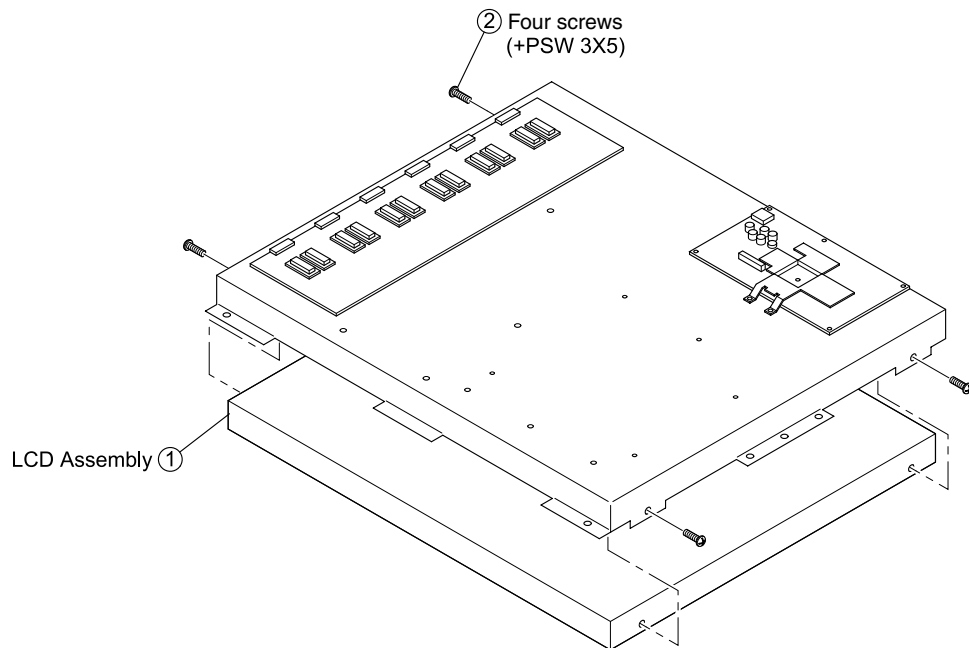
2-10. H5 BOARD REMOVAL



2-11. LCD BRACKET REMOVAL



2-12. LCD REMOVAL



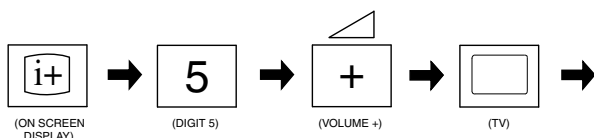
SECTION 3 ADJUSTMENTS

3-1. Signal Adjustment

Service adjustments to this model can be performed using the supplied remote Commander RM-Y1108.

How to enter into the Service Mode

1. Turn on the power to the TV set and enter into the stand-by mode.
2. Press the following sequence of buttons on the Remote Commander.



“TT—” will appear in the upper right corner of the screen.
Other status information will also be displayed.

3. Press ‘MENU’ on the remote commander to obtain the following menu on the screen.

```

TRIDENT PANEL TV
CHROMA DECODER
BACKLIGHT
SOUND
IF ADJUST
ERROR MENU

WA1 v0.21
Factory data FFh FFh
SERIAL NUMBER : 1234567890
  
```

4. Move to the corresponding adjustment item using the up or down arrow buttons on the Remote Commander.
5. Press the right arrow button to enter into the required menu item.
6. Press the ‘Menu’ button on the Remote Commander to quit the Service Mode when all adjustments have been completed.

Note :

- After carrying out the service adjustments, to prevent the customer accessing the ‘Service Menu’ switch the TV set OFF and then ON.

3-1-1. PAL auto adjustment (CVBS)

1. Select AV1 and input PAL signal.
2. Change the TV to Personal Mode and set the following registers.

Contrast - 90
Brightness - 50
Colour - 50

3. Set the TV in Service Mode (See opposite) and send “TT51” command.

3-1-2. PAL auto adjustment (RGB)

1. Select AV1 and input RGB signal.
2. Change the TV to Personal Mode and set the following registers.

Contrast - 90
Brightness - 50
Colour - 50

3. Set the TV in Service Mode (See opposite) and send “TT52” command.

3-2. White Balance Adjustment

3-2-1. White Balance adjustment (H/L)

1. Select AV1.
2. Change the TV to Personal Mode and set the following registers.

Contrast - Max
Brightness - 50
Colour - 50
Backlight - Max

3. Input PAL CVBS 70 IRE Full Field Signal to AV1.
4. Enter the ‘SERVICE MENU’ using the cursor keys on the remote commander.
5. Adjust Highlight registers:

NORMAL_PAL_RD (R Drive)
NORMAL_PAL_BD (B Drive)

High light adjustment value (10500K-6MPCD)

	KLV-20SR3	range
x	0 2798	0.8JND
y	0 2823	
y	-	N/A

3-2-2. White Balance adjustment (C/O)

1. Select AV1.
2. Change the TV to Personal Mode and set the following registers.

Contrast - Max
Brightness - 50
Colour - 50
Backlight - Max

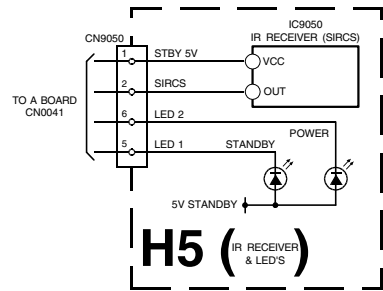
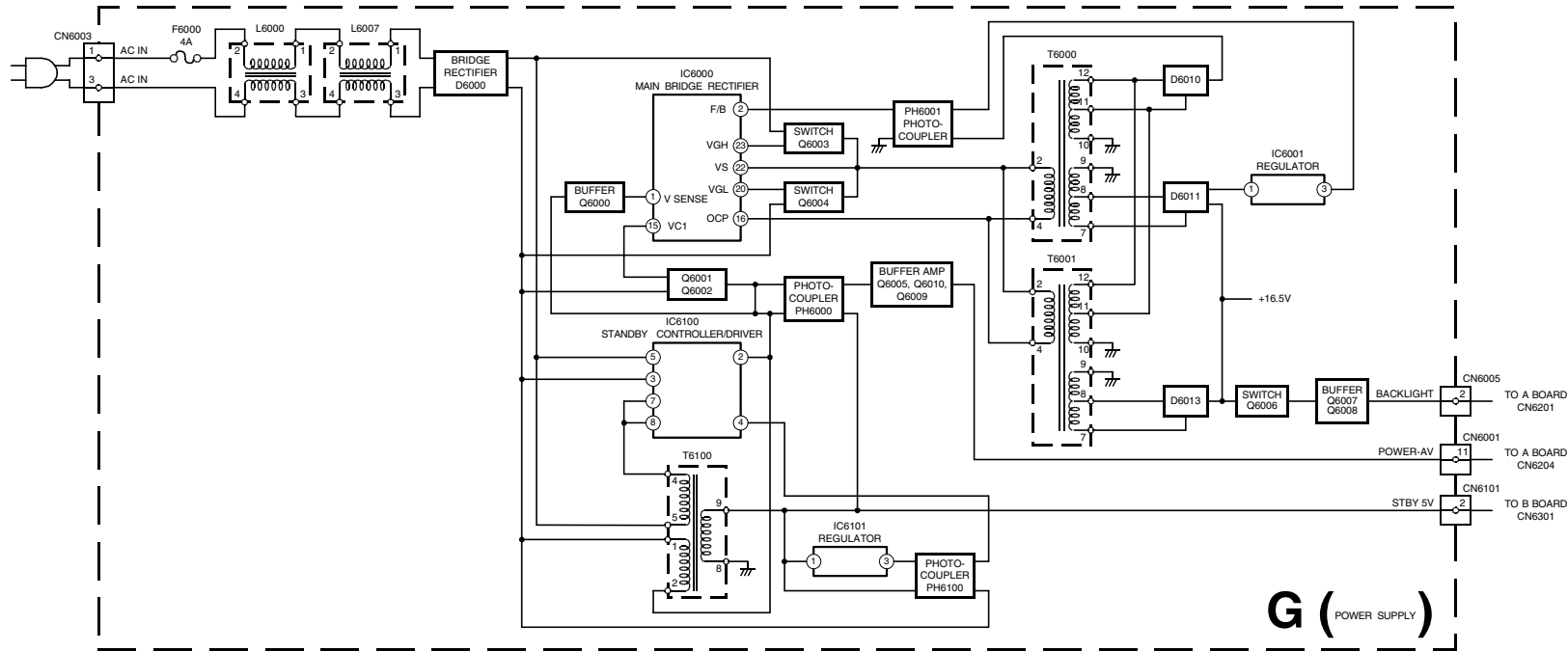
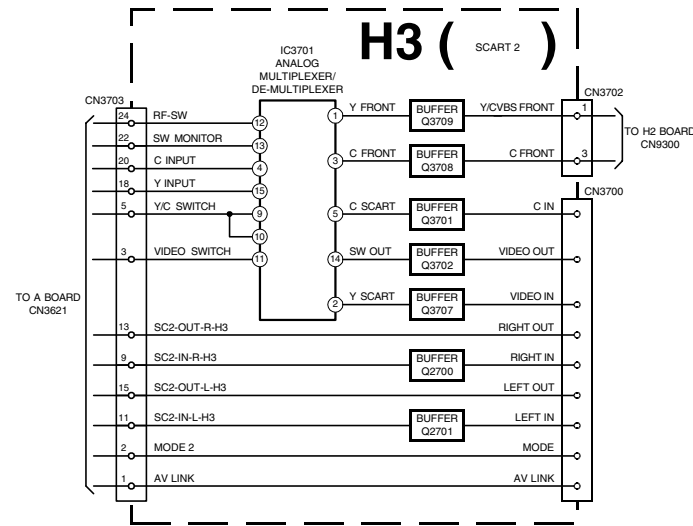
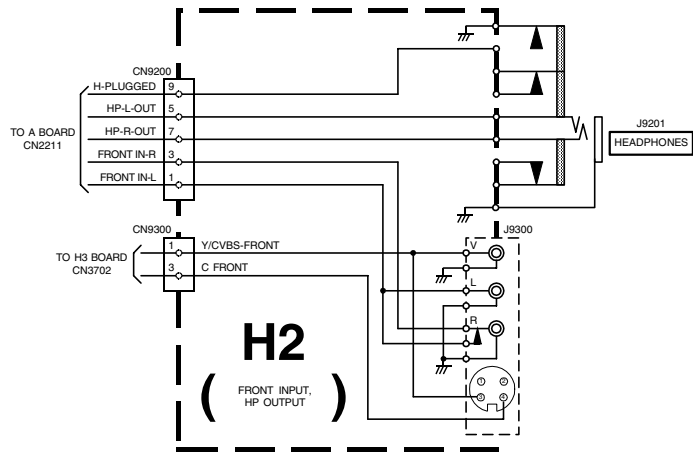
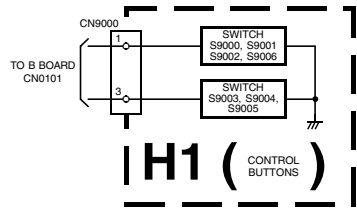
3. Input PAL CVBS 20 IRE Full Field Signal to AV1.
4. Enter the ‘SERVICE MENU’ using the cursor keys on the remote commander.
5. Adjust CutOff registers:

NORMAL_PAL_RC (R cutoff)
NORMAL_PAL_BC (B cutoff)

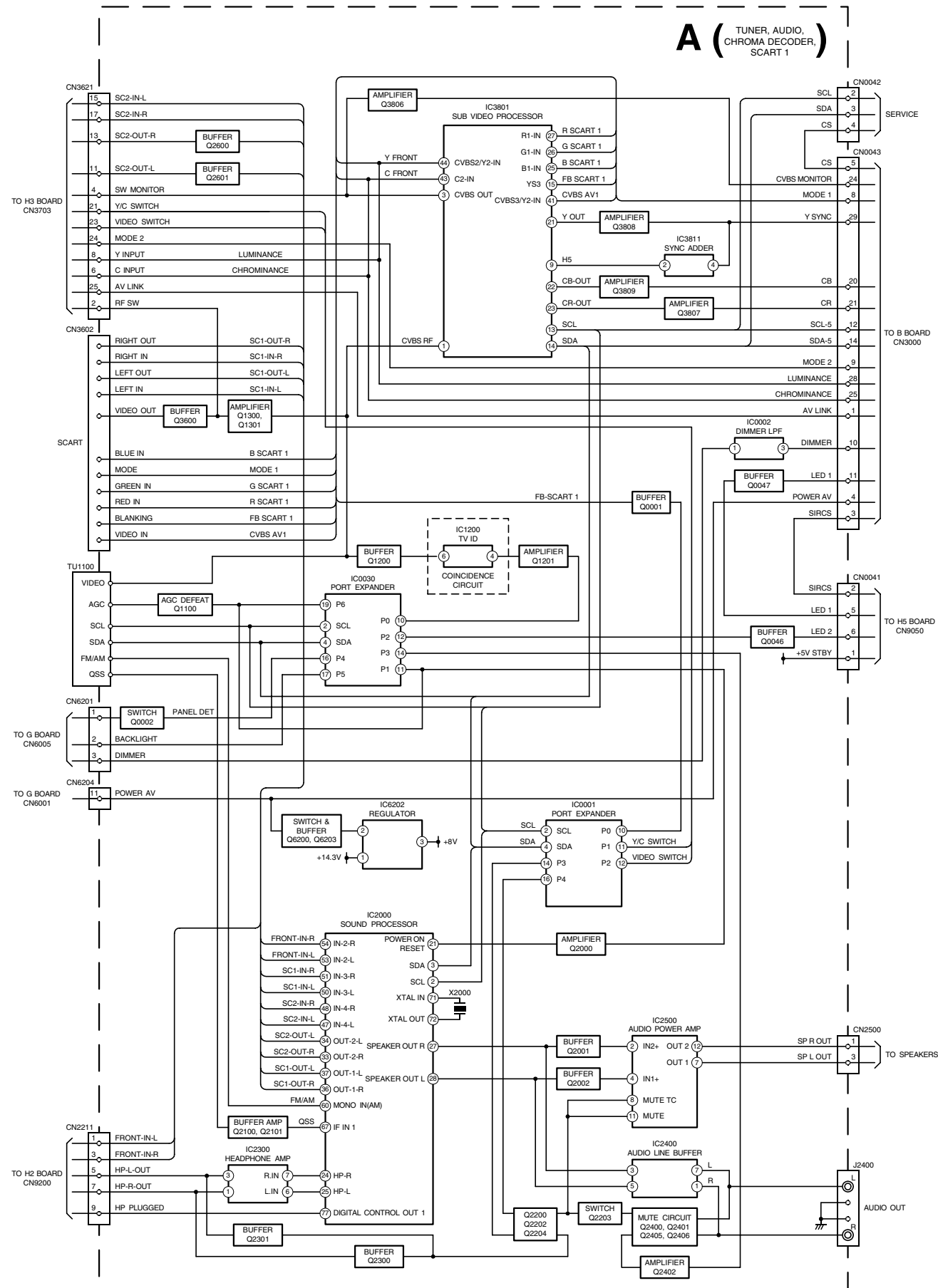
Low light (Cut Off) adjustment value (10500K-6MPCD)

	KLV-20SR3	range
x	0 2798	0.8JND
y	0 2823	
y	-	N/A

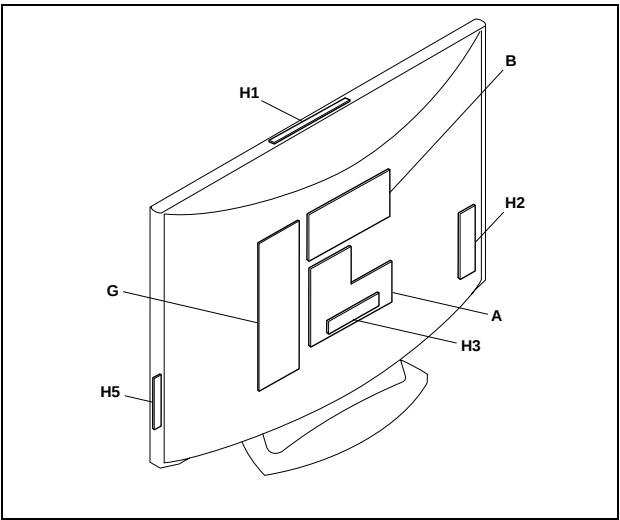
4-1. BLOCK DIAGRAMS (1)



4-1. BLOCK DIAGRAMS (2)



4-2. CIRCUIT BOARD LOCATION



4-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

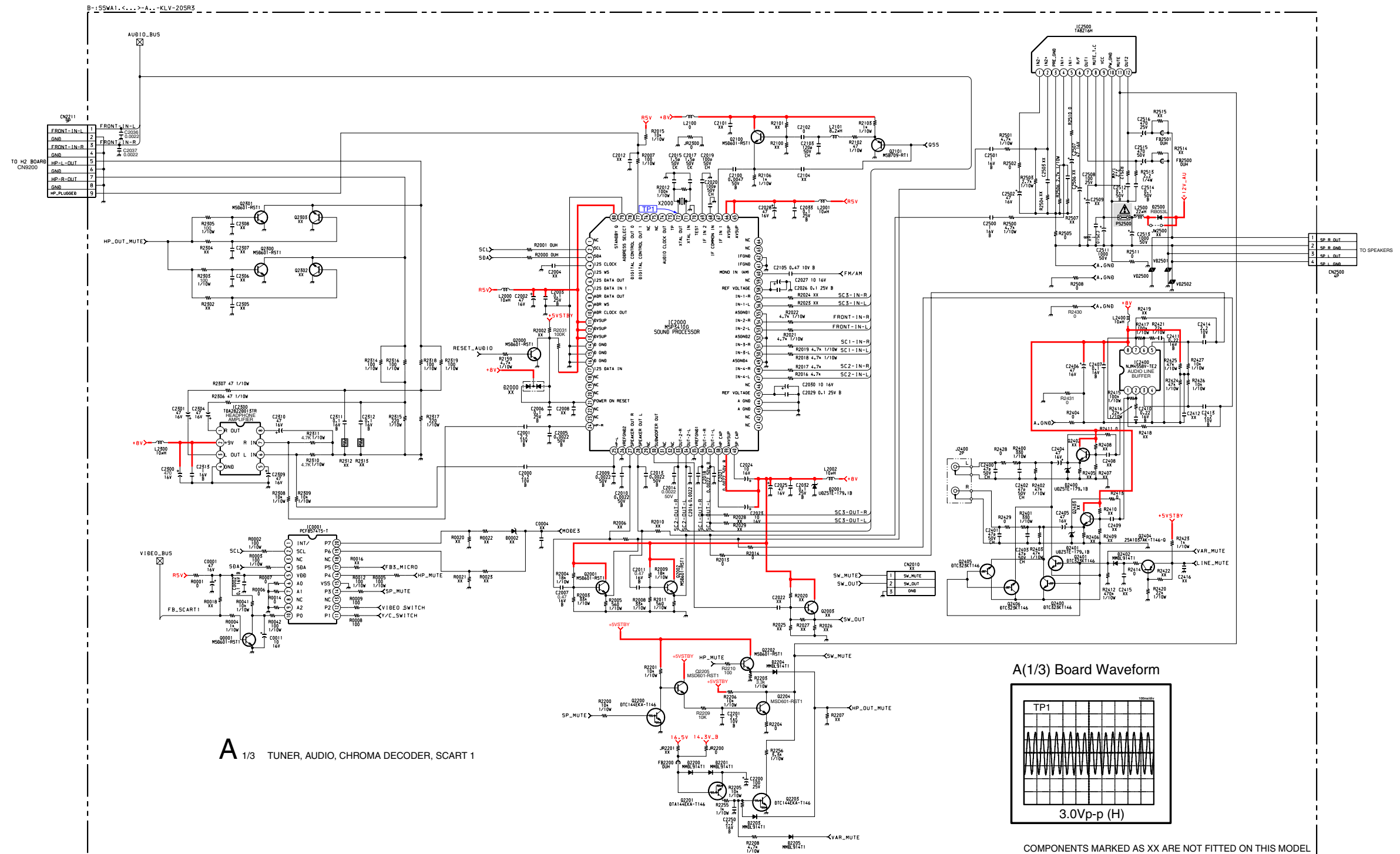
- Note :**
- All capacitors are in μF unless otherwise noted.
 - pF : μF 50WV or less are not indicated except for electrolytic types.
 - Indication of resistance, which does not have one for rating electrical power, is as follows.
- Pitch : 5mm
Electrical power rating : 1/4W
- Chip resistors are 1/10W
 - All resistors are in ohms.
 $k = 1000 \text{ ohms}$, $M = 1000,000 \text{ ohms}$
- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
 - All voltages are in Volts.
 - Readings are taken with a 10Mohm digital mutimeter.
 - Readings are taken with a color bar input signal.
 - Voltage variations may be noted due to normal production tolerances.
- : B - bus.
- : RF signal path.
- : earth - ground.
- : earth - chassis.

Reference Information

RESISTOR	RN	: METAL FILM
	RC	: SOLID
	FPRD	: NON FLAMMABLE CARBON
	FUSE	: NON FLAMMABLE FUSIBLE
	RS	: NON FLAMMABLE METAL OXIDE
	RB	: NON FLAMMABLE CEMENT
	RW	: NON FLAMMABLE WIREWOUND
		: ADJUSTMENT RESISTOR
COIL	LF-8L	: MICRO INDUCTOR
CAPACITOR	TA	: TANTALUM
	PS	: STYROL
	PP	: POLYPROPYLENE
	PT	: MYLAR
	MPS	: METALIZED POLYESTER
	MPP	: METALIZED POLYPROPYLENE
	ALB	: BIPOLAR
	ALT	: HIGH TEMPERATURE
	ALR	: HIGH RIPPLE

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

Note : Les composants identifiés par une trame et par une marque Δ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.



A B C D E F G H I J K L M N O

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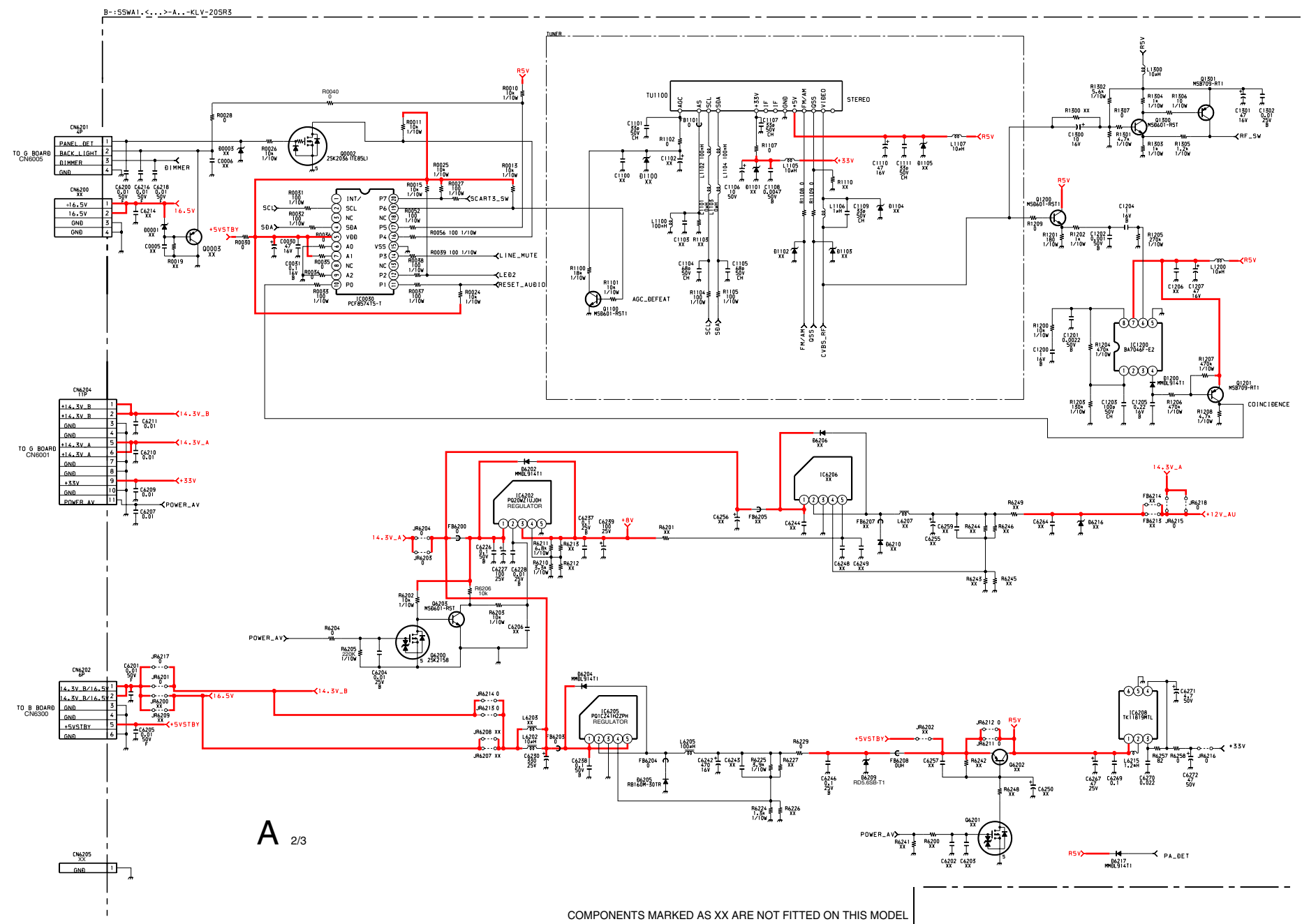
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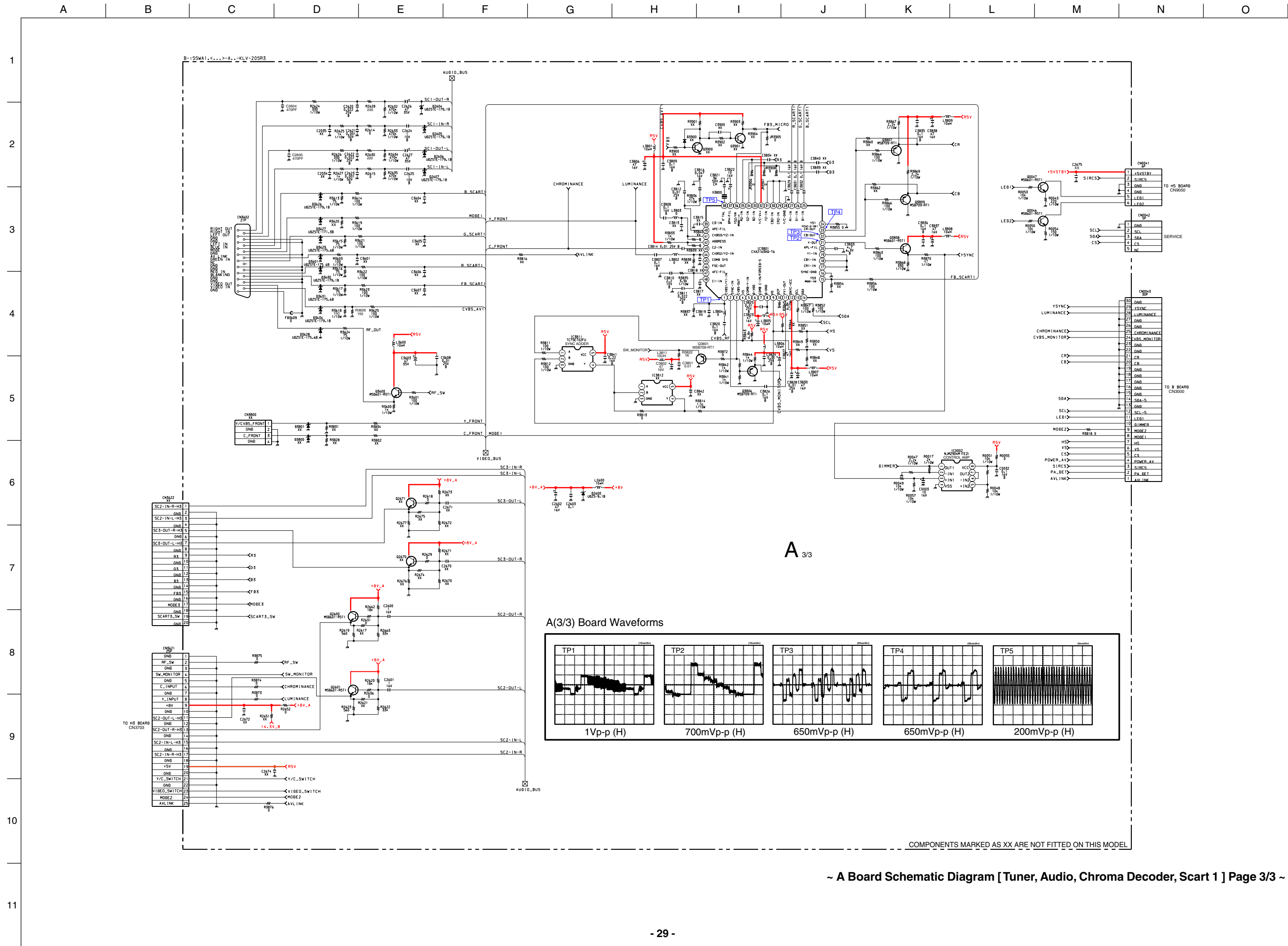
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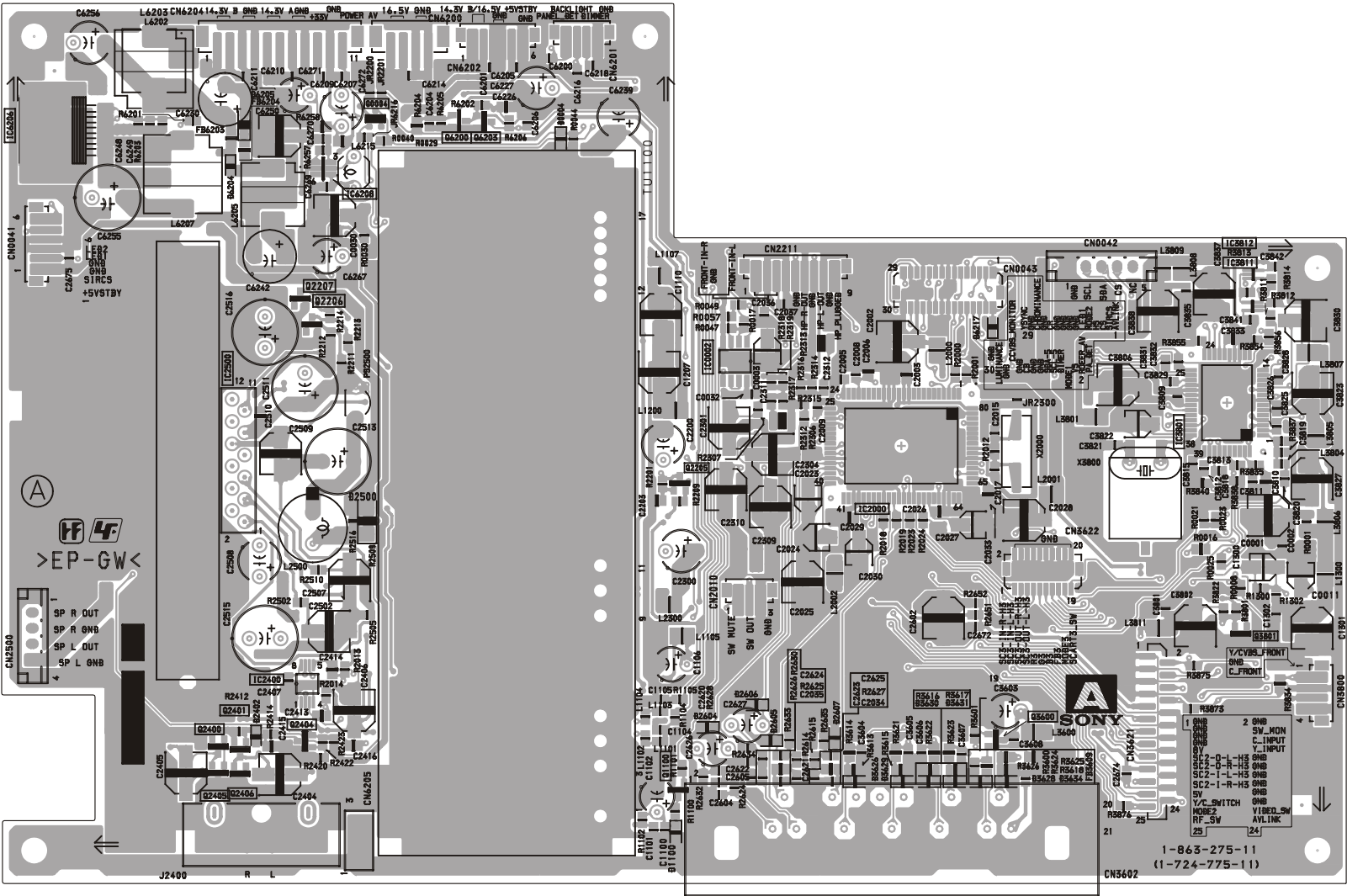
10

11





~ A Printed Wiring Board Conductor Side A ~



~ A Board Semiconductor Location Table Side A ~

DIODE		D3634 H - 6		IC	
D2402	C - 6	D6204	C - 3	Q1100	F - 6
D2500	D - 5	D6205	C - 2	Q2205	F - 4
D2604	F - 6	D6217	H - 4	Q2400	C - 6
D2605	F - 6	IC		Q2401	C - 6
D2606	F - 6	IC0002	F - 4	Q2404	C - 6
D2607	G - 6	IC2000	G - 4	Q2405	C - 6
D3626	G - 6	IC2400	C - 6	Q2406	C - 6
D3628	H - 6	IC2500	C - 4	Q3600	H - 6
D3629	G - 6	IC3801	I - 4	Q3801	I - 6
D3630	G - 6	IC3811	I - 3	Q6200	D - 2
D3631	G - 6	IC6208	D - 3	Q6203	E - 2

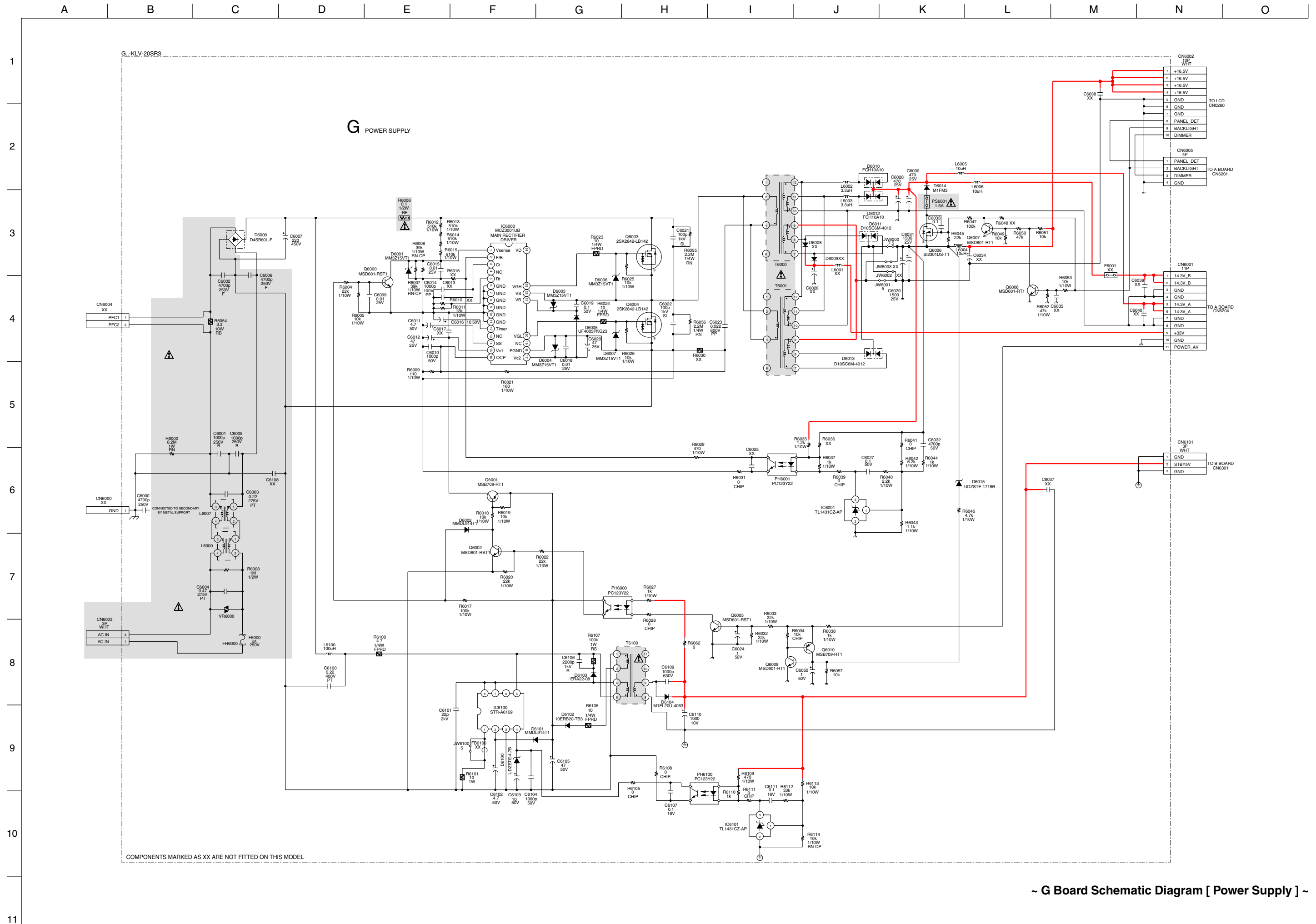
~ A Board Semiconductor Voltage Table ~

Ref	(e)(s)	(b)(g)	(c)(d)	Ref	(e)(s)	(b)(g)	(c)(d)	Ref	(e)(s)	(b)(g)	(c)(d)	Ref	(e)(s)	(b)(g)	(c)(d)
Q2400	0	0.4	0	Q2404	0.7	0.1	0.6	Q2406	0	0.4	0	Q6200	0	3.3	0
Q2401	0	0.4	0	Q2405	0	0.4	0	Q3600	2.3	3.0	5.1	Q6009	0	0	10.1

~ A Board IC Voltage Table ~

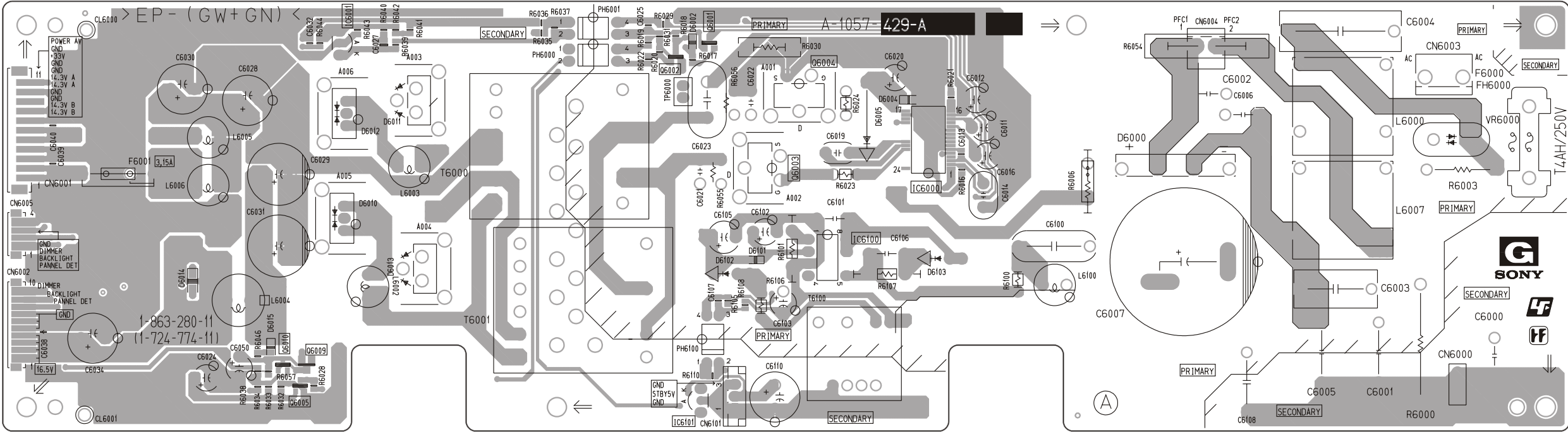
Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)				
IC0002	1	2.1	IC2000	5	0.1	IC2000	21	4.6	IC2000	38	7.2	IC2000	55	0	IC2000	77	0	IC2500	IC2500	11	0	IC3801	IC3801	11	2.5	IC3801	IC3801	26	2.5	
	2	1.1		6	0.1		24	0		39	8.1		56	3.8		80	5.0			12	7.2			27	2.5					
	3	1.1		7	0.1		25	0		40	7.1		57	3.8	IC2400	1	4.0		3	0	1		2.4	13	3.5		32	5.0		
	5	2.5		8	0.2		27	0.2		45	3.7		60	3.8		2	4.0		4	0	2		2.1	14	3.7		37	1.1		
	6	2.5		9	0.2		28	0.2		47	0.4		65	5.0		3	4.0		5	1.7	3		1.5	15	0		38	4.0		
	7	2.5		10	0.2		30	0.2		48	0.4		66	5.0		4	0		6	5.4	5		2.1	20	2.4		IC3811	IC3811	1	0
	8	5.1		11	5.0		33	3.8		50	3.8		67	1.5		5	4.0		7	7.4	6		5.1	21	1.6				2	0.3
	IC2000	2		3.5	12		5.0	34		3.8	51		3.8	68		1.5	6		4.0	8	5.1		7	2.6	22				1.8	3
3		3.5	13	5.0	36	3.8	53	3.8	71	2.4	7	4.0	9	15.9	9	0.3	23	1.8	4	4.5										
4		0.3	17	0	37	3.8	54	3.8	72	2.3	8	8.1	10	0	10	0.8	25	2.5	5	5.1										

DIODE		IC0030 G - 3	Q2002 G - 4
D1200	G - 4	IC1200 G - 4	Q2100 D - 4
D2001	E - 5	IC2300 E - 4	Q2101 D - 4
D2200	G - 4	IC6202 G - 2	Q2200 E - 4
D2201	G - 4	IC6205 I - 4	Q2201 G - 4
D2202	G - 4	TRANSISTOR	Q2202 G - 4
D2203	G - 4	Q0001 B - 5	Q2203 E - 5
D2204	G - 4	Q0002 F - 2	Q2204 G - 5
D2205	G - 5	Q0046 J - 3	Q2205 G - 5
D2600	D - 6	Q0047 J - 3	Q2300 E - 4
D3601	D - 6	Q1200 F - 4	Q2301 E - 4
D3627	E - 6	Q1201 G - 4	Q2600 D - 5
D6202	G - 3	Q1300 B - 5	Q2601 D - 6
D6209	I - 3	Q1301 B - 6	Q3806 B - 4
IC		Q2000 H - 4	Q3808 B - 3
IC0001	B - 5	Q2001 G - 4	Q3809 B - 3



A B C D E F G H I J K L M N O

~ G Printed Wiring Board Conductor Side A ~



~ G Board IC Voltage Table ~

Ref No	Pin No	Volts (V)
IC6000	1	-85.0
	2	-85.6
	3	-85.3
	5	-85.3
	12	-86.6
	14	-82.6
	15	-75.5
	16	-86.7
	17	-80.9
	20	-84.0
IC6001	21	7.0
	23	4.2
	24	-84.6
IC6100	1	2.5
	3	12.7
	1	-86.1
	2	-75.4
	3	-86.3
	4	-85.8
	5	93.8
	7	92.5
IC6101	8	92.4
	1	2.5
	3	3.2

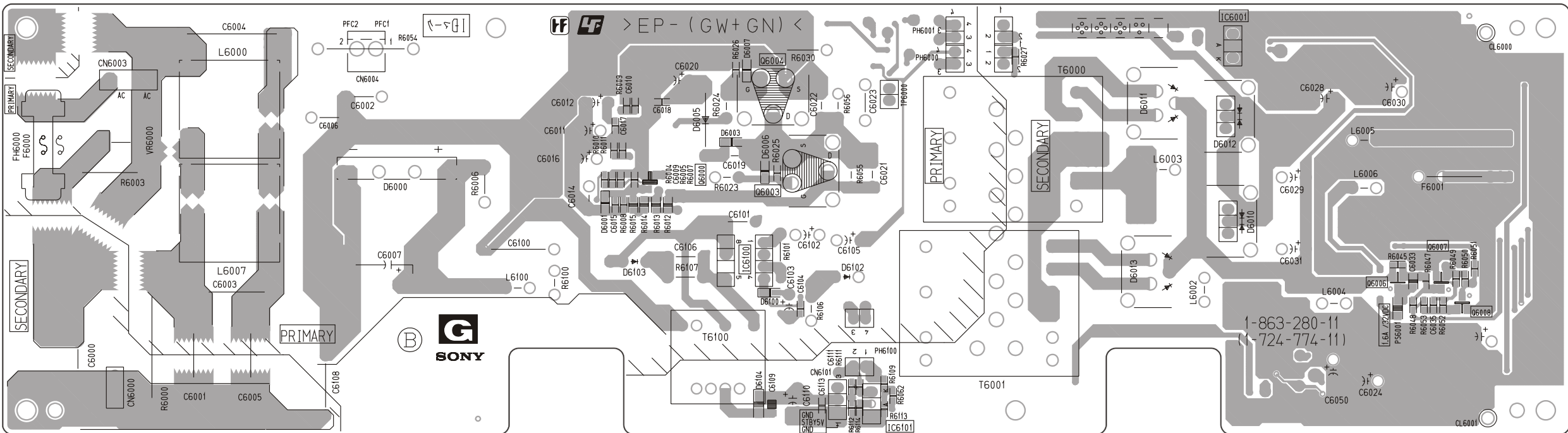
~ G Board Semiconductor Location Table Side A ~

DIODE		D6004	H - 2	D6011	D - 2	D6015	C - 4	D6103	H - 3	IC6001	D - 1	TRANSISTOR	Q6003	G - 2	Q6009	C - 4	
D6000	J - 2	D6005	H - 2	D6012	D - 2	D6101	G - 3	IC		IC6100	H - 3	Q6001	G - 1	Q6004	H - 1	Q6010	C - 4
D6002	F - 1	D6010	D - 3	D6013	D - 3	D6102	G - 3	IC6000	H - 2	IC6101	F - 4	Q6002	F - 1	Q6005	C - 4		

~ G Board Semiconductor Voltage Table ~

Ref	(e)(s)	(b)(g)	(c)(d)	Ref	(e)(s)	(b)(g)	(c)(d)	Ref	(e)(s)	(b)(g)	(c)(d)
Q6001	-75.5	-76.1	-75.5	Q6003	0	4.2	93.7	Q6005	0	0.6	0
Q6002	-86.7	-86.1	-86.7	Q6004	-87.0	-83.8	0	Q6009	0	0	3.1

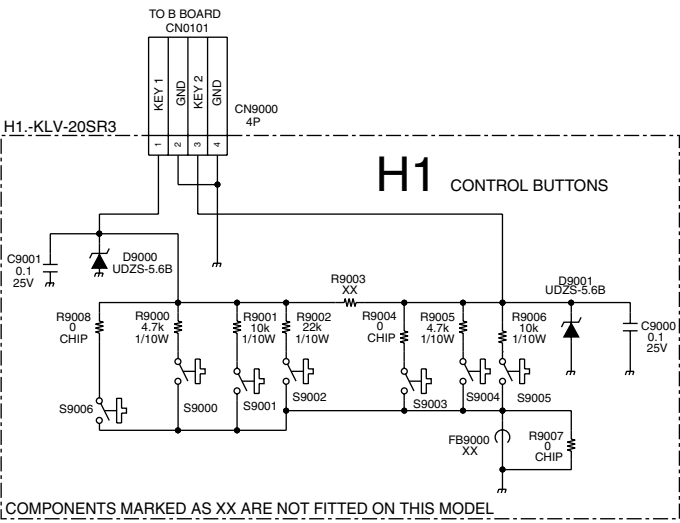
~ G Printed Wiring Board Conductor Side B ~



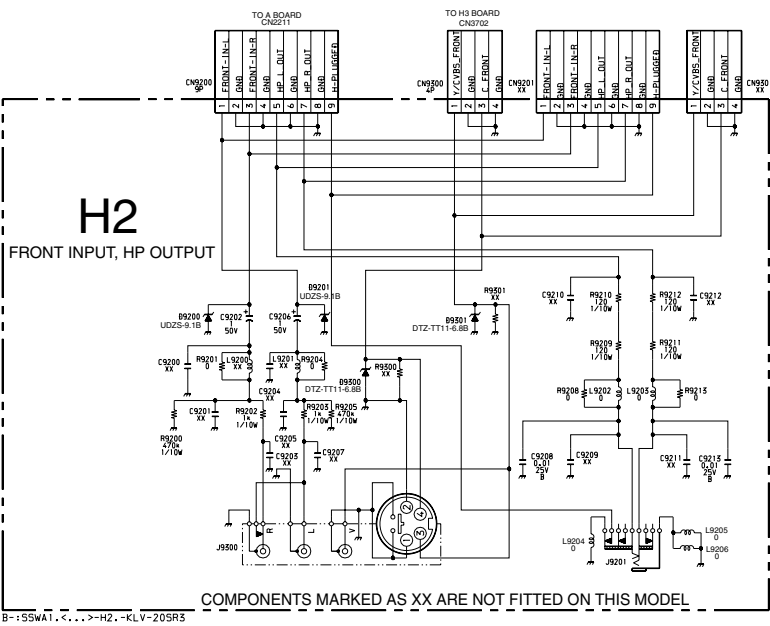
~ G Board Semiconductor Location Table Side B ~

DIODE	D6003	G - 7	D6007	G - 7	D6012	K - 7	D6100	G - 9	D6103	F - 8	IC6100	G - 8	Q6003	G - 8	Q6007	M - 8
D6000	D - 8	D6005	G - 7	D6010	K - 8	D6013	J - 8	D6100	G - 9	IC	TRANSISTOR	Q6004	G - 7	Q6008	M - 9	
D6001	F - 8	D6006	G - 7	D6011	J - 7	D6014	B - 3	IC6102	H - 8		Q6000	F - 8	Q6006	L - 8		
									IC6001	K - 6						

~ H1 Board Schematic Diagram [Control Buttons] ~



~ H2 Board Schematic Diagram [Front Input, HP Output] ~

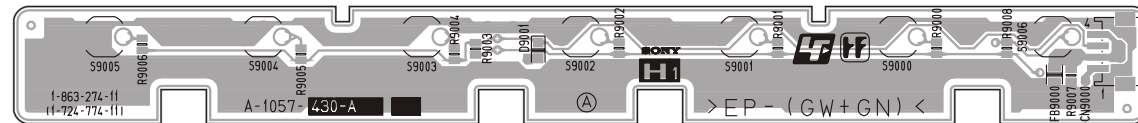


A B C D E F G H I J K L M N O

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~ H1 Printed Wiring Board Conductor Side A ~



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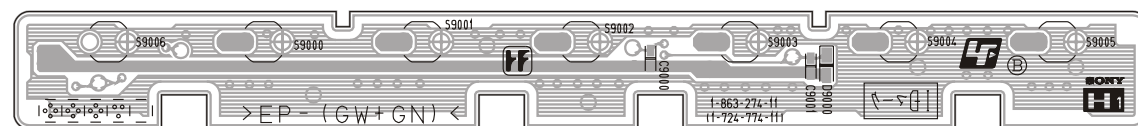
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~ H1 Printed Wiring Board Conductor Side B ~



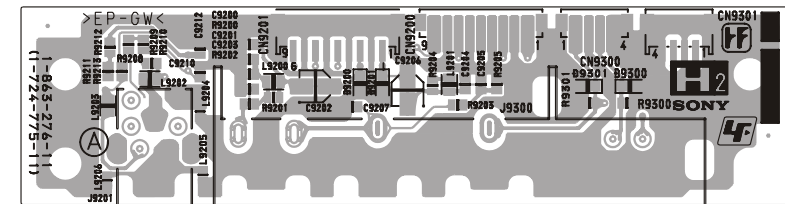
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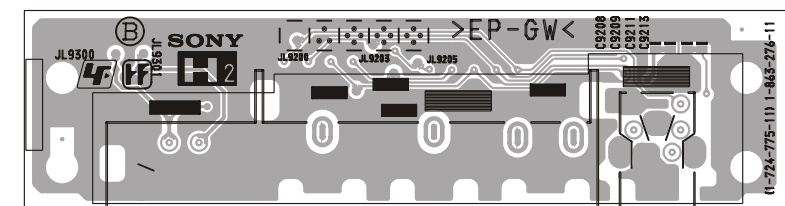
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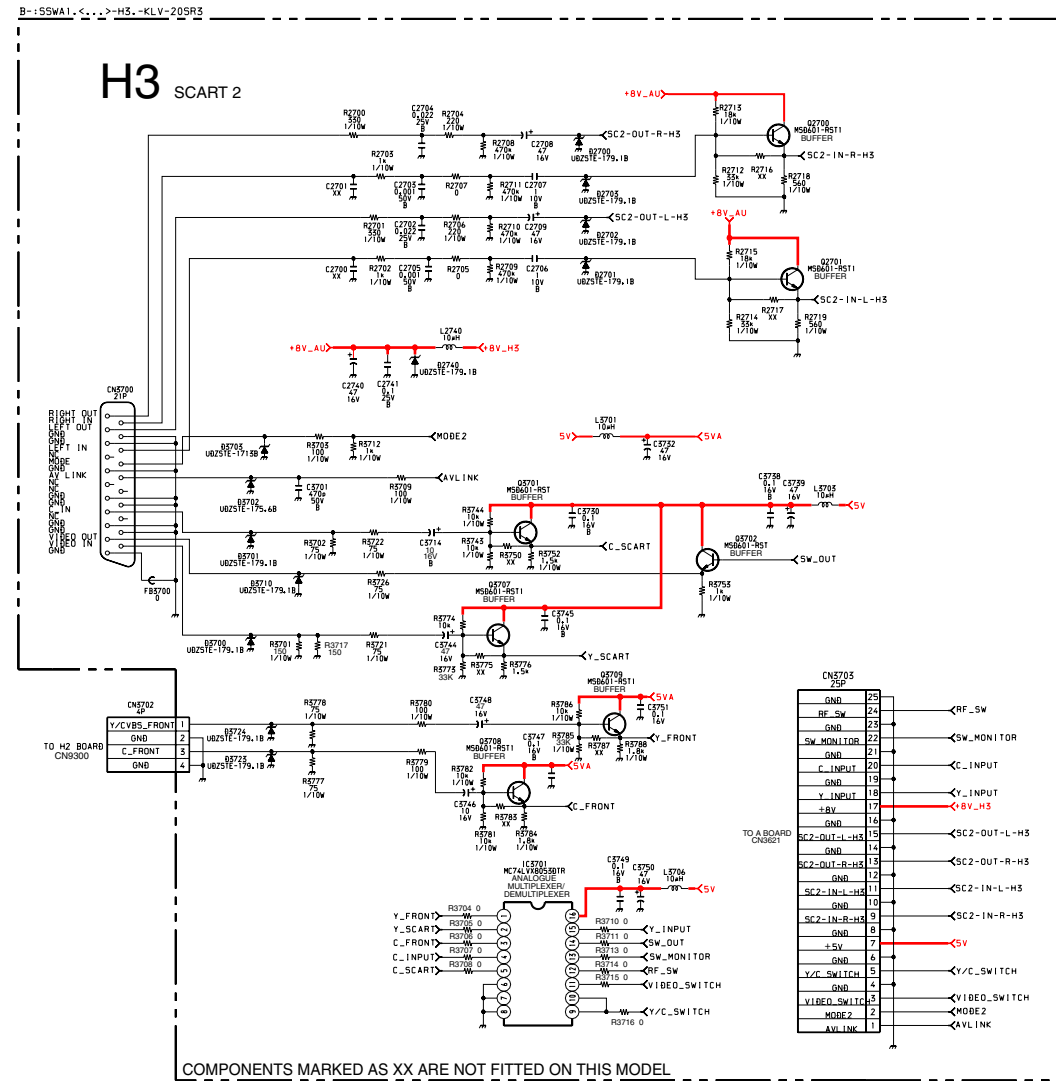
~ H2 Printed Wiring Board Conductor Side A ~



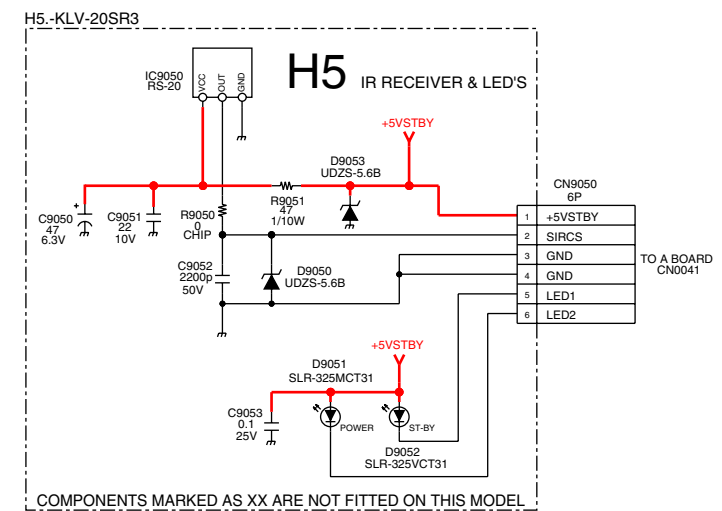
~ H2 Printed Wiring Board Conductor Side B ~



~ H3 Board Schematic Diagram [Scart 2] ~

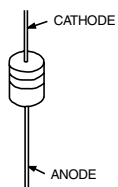


~ H5 Board Schematic Diagram [IR Receiver & LED's] ~

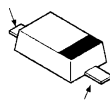


4-4. SEMICONDUCTORS

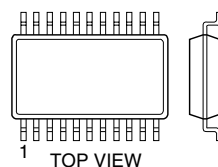
10ERB20-TB3
ERA22-08
RD5.6ESB2



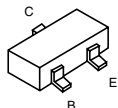
M1FM3
M1FL20U-4063
RB160M-30TR



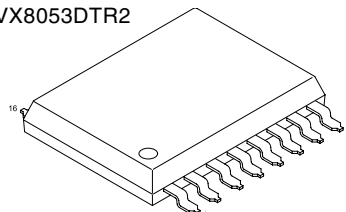
PCF8574TS-T



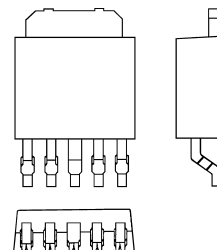
2SA1037AK-T146
2SC1623-L5L6
2SK2036(TE85L)
2SK2158-T2B
DTC144EKA
DTC144EKA-T146
MSB709-RT1
MSD601-RST1



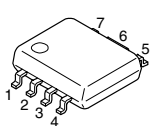
MC74LVX8053DTR2



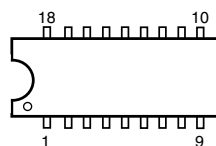
PQ1CZ41H2ZPH
PQ20WZ1UJ00H



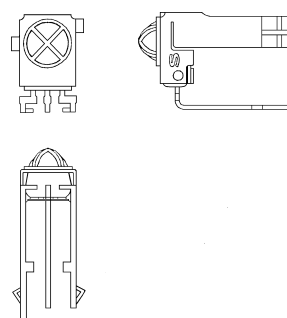
BA7046



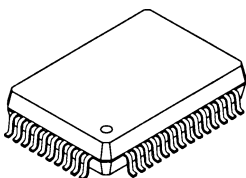
MCZ3001D



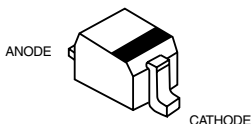
RPM7140-H8



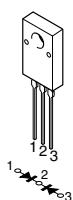
CXA2163AQ



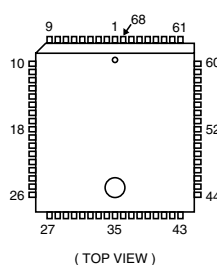
MMDL914T1
MM3Z15VT1
UDZSTE-1713B
UDZSTE-1718B
UDZSTE-175.6B
UDZSTE-179.1B



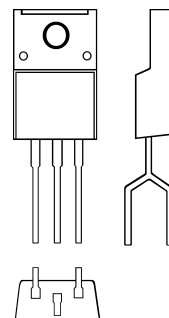
D10SC6M-4012



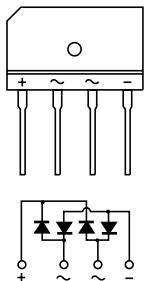
MSP3411G-QA-B11



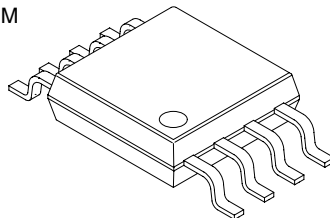
S2K2842 (LBS2SONY)



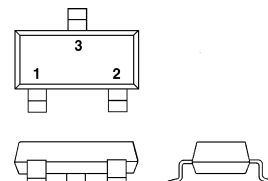
D4SBS6L



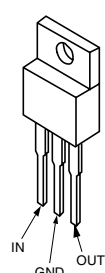
NJM2904M



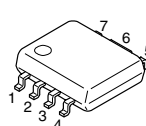
SI2301DS-T1



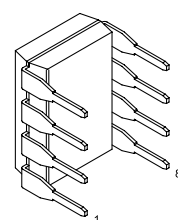
FCH10A10



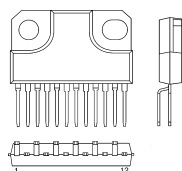
NJM4558V-TE2



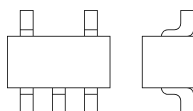
STR-A6169



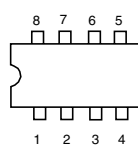
TA8216H



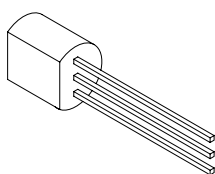
TC7SET02F(TE85L)



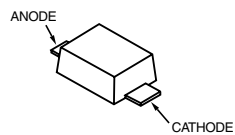
TDA2822D013TR



TL1431CZ-AP



UF4005PKG23



SECTION 5 EXPLODED VIEWS

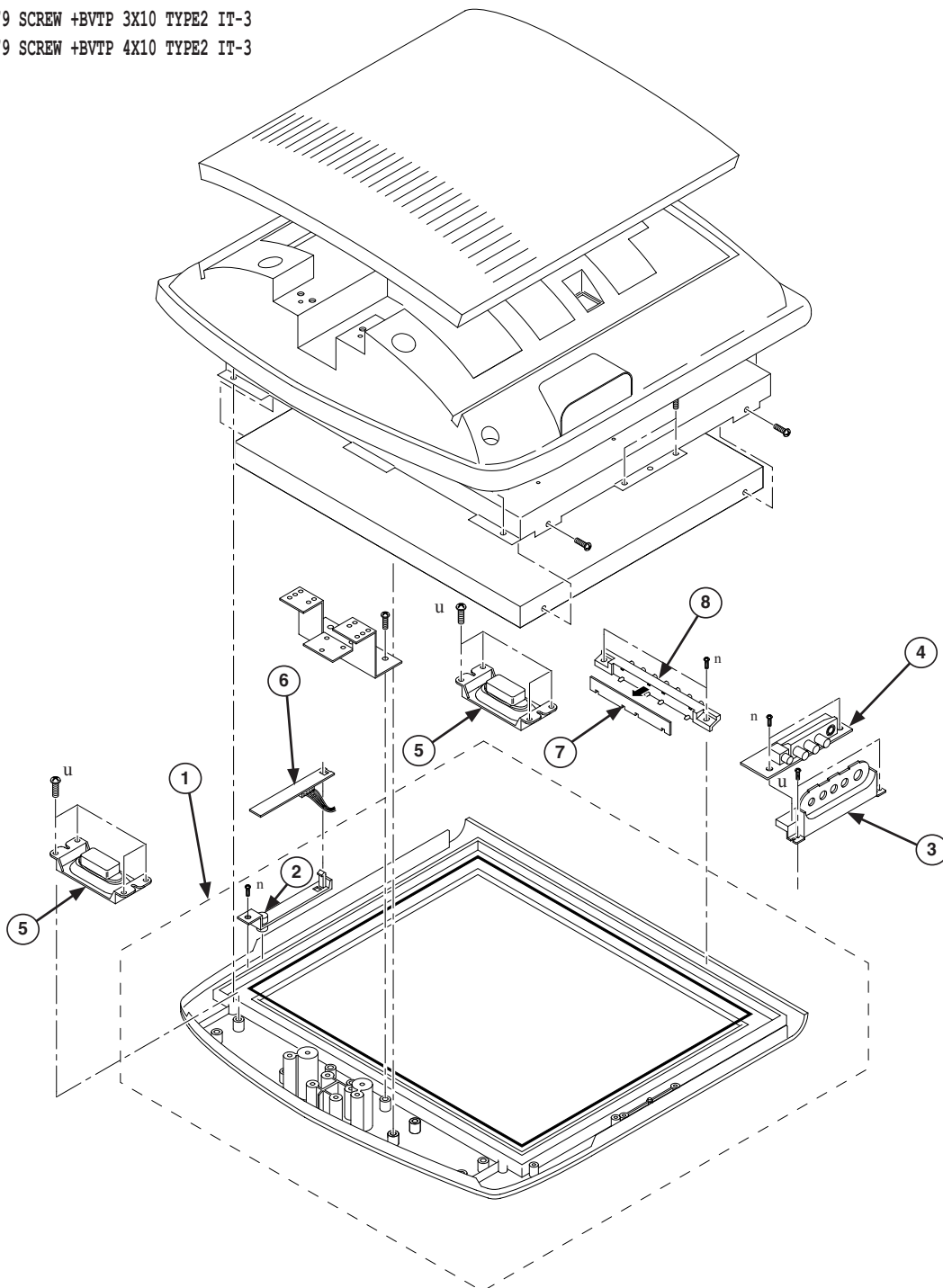
NOTE :

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

5-1. FRONT CABINET ASSY AND SPEAKERS

n 7-685-647-79 SCREW +BVTP 3X10 TYPE2 IT-3

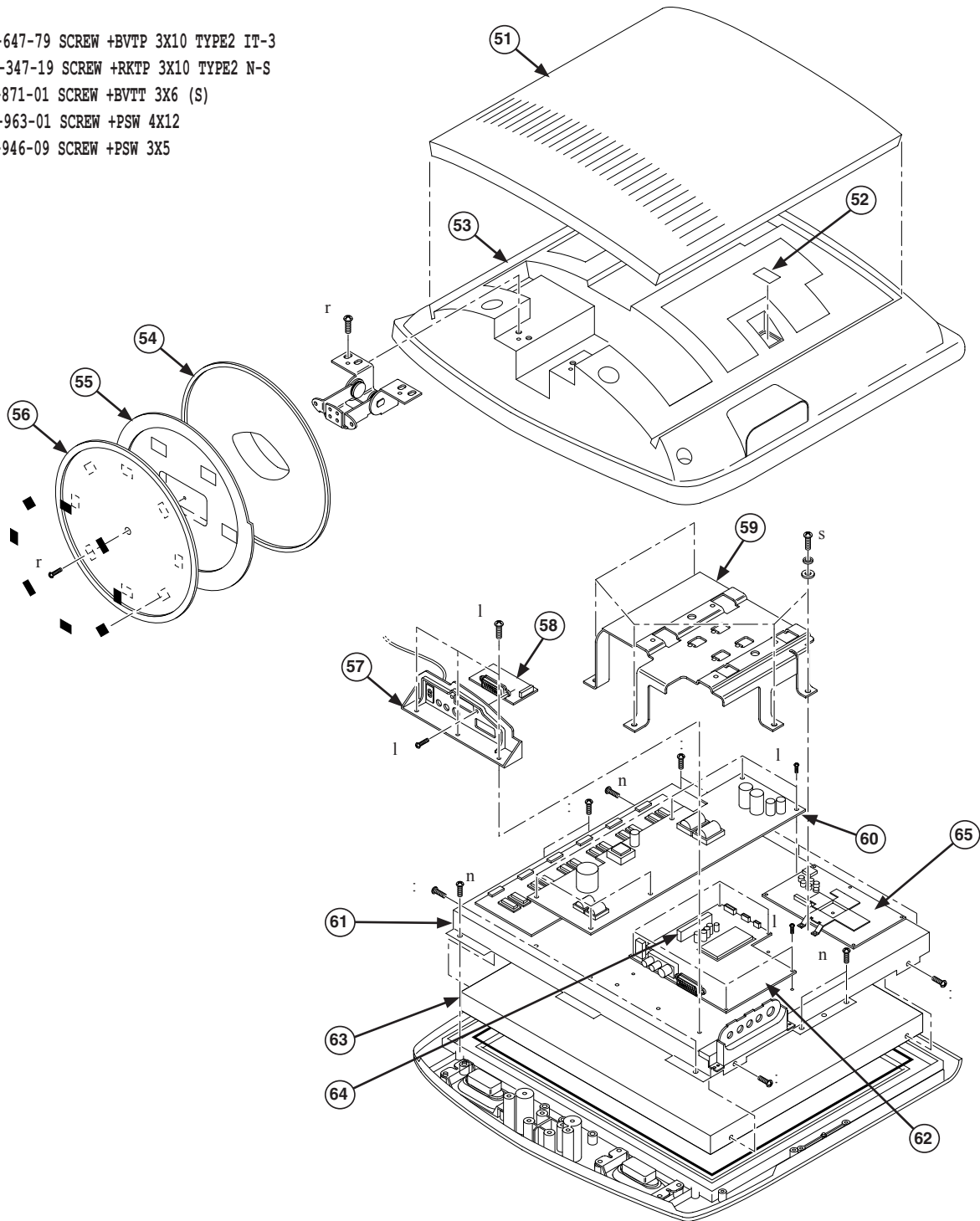
u 7-685-660-79 SCREW +BVTP 4X10 TYPE2 IT-3



REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
1	X-2022-061-1	CABINET ASSY, FRONT(20) (SILVER)	2	5	1-825-959-11	LOUDSPEAKER (4X7CM)	
	X-2022-280-1	CABINET ASSY, FRONT(20) (BLACK)	2	6	*A-1057-434-A	H5 MOUNT	
2	2-022-910-01	GUIDE LIGHT		7	*A-1057-430-A	H1 MOUNT	
3	*2-022-921-01	HOLDER, SIDE JACK(20)		8	2-021-161-01	BUTTON, MULTI	
4	*A-1068-281-A	H2 COMPLETE BOARD					

5-2. REAR CABINET ASSY AND CHASSIS

- r 7-685-647-79 SCREW +BVTP 3X10 TYPE2 IT-3
- n 7-685-347-19 SCREW +RKTP 3X10 TYPE2 N-S
- l 7-685-871-01 SCREW +BVTT 3X6 (S)
- s 7-682-963-01 SCREW +PSW 4X12
- : 7-682-946-09 SCREW +PSW 3X5



REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
51	X-2022-063-1	CABINET ASSY, REAR(20) (SILVER)		57	*2-022-917-01	BRACKET, TERMINAL	
	X-2022-278-1	CABINET ASSY, REAR(20) (BLACK)		58	*A-1057-432-A	H3 BOARD, COMPLETE	
52	*2-109-144-01	SERVICE,PLATE (SILVER)		59	*2-022-918-01	BRACKET, VESA	
	*2-109-144-11	SERVICE,PLATE (BLACK)		60	*A-1057-429-A	G BOARD, COMPLETE	
53	*2-022-913-01	COVER, REAR (SILVER)		61	*2-022-920-01	BRACKET, (20) LCD	
	*2-022-913-11	COVER, REAR (BLACK)		62	*A-1068-279-A	A BOARD, COMPLETE	
54	*2-022-915-01	RING, STAND		63	1-805-627-11	LCD PANEL(20.1 INCH VGA TFT)	
55	*2-022-914-01	BASE, STAND		64	8-597-936-00	TUNER, FSS BTF-EF411Z	
56	*2-022-916-01	PLATE, SWIVEL		65	A-1068-280-A	B BOARD, COMLETE	

SECTION 6 ELECTRICAL PARTS LIST

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Note : The B Board Schematic Diagram, Printed Wiring Board and Parts List are not indicated in this manual as the PWB is regarded as a non service item for exchange only.

Note : Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
Parts indicated (XX) on the Schematic Diagram are not used in this model and therefore do not appear in the Parts List.

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

G

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
* A-1057-429-A G Board Complete				CN6003	Δ *1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P	
	4-382-854-11	SCREW (M3X10), P, SW (+)		CN6005	1-573-290-21	PIN, CONNECTOR (1.5MM) (SMD) 4P	
		< CAPACITOR >		CN6101	*1-816-974-51	PLUG, CONNECTOR 3P	
C6000	1-113-924-11	CERAMIC	0.0047UF 20.00% 250V			< DIODE >	
C6001	Δ 1-119-899-51	CERAMIC	1000PF 10.00% 250V	D6000	8-719-510-53	DIODE D4SB60L	
C6002	Δ 1-161-964-91	CERAMIC	0.0047UF 250V	D6001	8-719-082-03	DIODE MM3Z15VT1	
C6003	Δ 1-165-529-11	MYLAR	0.22UF 10 275V	D6002	8-719-081-97	DIODE MMDL914T1	
C6004	Δ 1-165-530-11	MYLAR	0.47UF 10 275V	D6003	8-719-082-03	DIODE MM3Z15VT1	
				D6004	8-719-082-03	DIODE MM3Z15VT1	
C6005	Δ 1-119-899-51	CERAMIC	1000PF 10.00% 250V	D6005	8-719-979-64	DIODE UF4005PKG23	
C6006	Δ 1-161-964-91	CERAMIC	0.0047UF 250V	D6006	8-719-082-03	DIODE MM3Z15VT1	
C6007	1-117-751-11	ELECT(BLOCK)	220UF 20.00% 450V	D6007	8-719-082-03	DIODE MM3Z15VT1	
C6009	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V	D6010	8-719-074-58	DIODE FCH10A10	
C6010	1-162-964-11	CERAMIC CHIP	0.001UF 10.00% 50V	D6011	8-719-057-96	DIODE D10SC6M-4012	
C6011	1-107-905-11	ELECT	4.7UF 20.00% 50V	D6012	8-719-074-58	DIODE FCH10A10	
C6012	1-107-888-11	ELECT	47UF 20.00% 25V	D6013	8-719-057-96	DIODE D10SC6M-4012	
C6014	1-136-479-11	FILM	0.001UF 5.00% 100V	D6014	8-719-081-67	DIODE M1FM3	
C6015	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V	D6015	8-719-083-66	DIODE UDZSTE-1718B	
C6016	1-107-906-11	ELECT	10UF 20.00% 50V	D6100	8-719-083-60	DIODE UDZSTE-174.7B	
C6018	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V	D6101	8-719-081-97	DIODE MMDL914T1	
C6019	1-136-165-00	FILM	0.1UF 5.00% 50V	D6102	6-500-567-31	DIODE 10ERB20-TB3	
C6020	1-107-888-11	ELECT	47UF 20.00% 25V	D6103	8-719-948-45	DIODE ERA22-08	
C6021	1-107-792-11	CERAMIC	100PF 5.00% 1KV	D6104	8-719-080-75	DIODE M1FL20U-4063	
C6022	1-107-792-11	CERAMIC	100PF 5.00% 1KV			< FUSE >	
C6023	1-100-311-11	FILM	22000PF 3% 800V	F6000	Δ 1-576-231-12	FUSE 4A 250V	
C6024	1-107-902-11	ELECT	1UF 20.00% 50V	FH6000	Δ 1-533-725-11	FUSE HOLDER	
C6027	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V			< IC >	
C6028	1-128-953-31	ELECT	470UF 20% 25V	IC6000	6-705-768-01	IC MCZ3001UB	
C6029	1-131-970-11	ELECT	1500UF 20% 25V	IC6001	8-759-586-17	IC TL1431CZ-AP	
C6030	1-128-953-31	ELECT	470UF 20% 25V	IC6100	6-600-279-01	IC STR-A6169	
C6031	1-131-970-11	ELECT	1500UF 20% 25V	IC6101	8-759-586-17	IC TL1431CZ-AP	
C6032	1-162-968-11	CERAMIC CHIP	0.0047UF 10.00% 50V			< COIL >	
C6033	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V	L6000	Δ 1-456-507-12	LINE FILTER COIL	
C6050	1-107-902-11	ELECT	1UF 20.00% 50V	L6002	1-412-519-11	INDUCTOR 3.3UH	
C6100	1-136-201-61	MYLAR	0.22UF 10.00% 400V	L6003	1-412-519-11	INDUCTOR 3.3UH	
C6101	1-109-879-11	CERAMIC	22PF 5.00% 2KV	L6004	1-406-659-11	INDUCTOR 10UH	
C6102	1-107-905-11	ELECT	4.7UF 20.00% 50V	L6005	1-412-525-31	INDUCTOR 10UH	
C6103	1-107-906-11	ELECT	10UF 20.00% 50V	L6006	1-412-525-31	INDUCTOR 10UH	
C6104	1-162-964-11	CERAMIC CHIP	0.001UF 10.00% 50V	L6007	Δ 1-456-507-12	LINE FILTER COIL	
C6105	1-107-909-11	ELECT	47UF 20.00% 50V	L6100	1-412-537-31	INDUCTOR 100UH	
C6106	1-104-331-11	CERAMIC	0.0022UF 10.00% 1KV			< PHOTOCOUPLER >	
C6107	1-107-826-11	CERAMIC CHIP	0.1UF 10.00% 16V	PH6000	8-749-016-81	PHOTO COUPLER PC123Y22	
C6109	1-131-872-91	CERAMIC CHIP	1000PF 10% 630V	PH6001	8-749-016-81	PHOTO COUPLER PC123Y22	
C6110	1-128-945-31	ELECT	1000UF 20% 10V	PH6100	8-749-016-81	PHOTO COUPLER PC123Y22	
C6111	1-107-826-11	CERAMIC CHIP	0.1UF 10.00% 16V				
		< CONNECTOR >					
CN6001	1-794-032-21	PIN, CONNECTOR (PC BOARD) 11P					
CN6002	1-766-382-21	PIN, CONNECTOR (1.5MM) (SMD) 10P					

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

G

H1

REF.NO.	PART.NO	DESCRIPTION	REMARK			REF.NO.	PART.NO	DESCRIPTION	REMARK		
< PROTECTOR MODULE >						R6037	1-216-821-11	METAL CHIP	1K	5%	1/10W
PS6001 Δ 1-533-651-11 IC LINK 1.6A 24V						R6038	1-216-821-11	METAL CHIP	1K	5%	1/10W
						R6039	1-216-864-11	SHORT CHIP	0		
						R6040	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
< TRANSISTOR >						R6041	1-216-864-11	SHORT CHIP	0		
Q6000	8-729-010-29	TRANSISTOR MSD601-RST1				R6042	1-218-866-11	METAL CHIP	6.2K	0.5%	1/10W
Q6001	8-729-010-05	TRANSISTOR MSB709-RT1				R6043	1-218-848-11	METAL CHIP	1.1K	0.5%	1/10W
Q6002	8-729-010-29	TRANSISTOR MSD601-RST1				R6044	1-216-821-11	METAL CHIP	1K	5%	1/10W
Q6003	6-550-526-11	TRANSISTOR 2SK2842 (LBS2SONY)				R6045	1-216-837-11	METAL CHIP	22K	5%	1/10W
Q6004	6-550-526-11	TRANSISTOR 2SK2842 (LBS2SONY)				R6046	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
Q6005	8-729-010-29	TRANSISTOR MSD601-RST1				R6047	1-216-845-11	METAL CHIP	100K	5%	1/10W
Q6006	8-729-046-75	TRANSISTOR SI2301DS-T1				R6049	1-216-833-11	METAL CHIP	10K	5%	1/10W
Q6007	8-729-010-25	TRANSISTOR MSD601-RT1				R6050	1-216-841-11	METAL CHIP	47K	5%	1/10W
Q6008	8-729-010-25	TRANSISTOR MSD601-RT1				R6051	1-216-833-11	METAL CHIP	10K	5%	1/10W
Q6009	8-729-010-25	TRANSISTOR MSD601-RT1				R6052	1-216-841-11	METAL CHIP	47K	5%	1/10W
Q6010	8-729-010-05	TRANSISTOR MSB709-RT1				R6053	1-216-833-11	METAL CHIP	10K	5%	1/10W
< RESISTOR >						R6054	Δ 1-202-962-11	CEMENTED	3.3	5%	10W
R6000	Δ 1-218-265-11	METAL	8.2M	5%	1W	R6055	1-245-494-21	METAL	2.2M	2%	1/4W
R6003	Δ 1-219-759-11	METAL	1M	5%	1/2W	R6056	1-245-494-21	METAL	2.2M	2%	1/4W
R6004	1-216-837-11	METAL CHIP	22K	5%	1/10W	R6057	1-216-833-11	METAL CHIP	10K	5%	1/10W
R6005	1-216-833-11	METAL CHIP	10K	5%	1/10W	R6062	1-216-864-11	SHORT CHIP	0		
R6006	Δ 1-202-933-61	FUSIBLE	0.1	10%	1/2W	R6100	1-249-389-11	CARBON	4.7	5%	1/4W
R6007	1-218-885-11	METAL CHIP	39K	0.5%	1/10W	R6101	1-215-857-11	METAL OXIDE	10	5%	1W
R6008	1-218-885-11	METAL CHIP	39K	0.5%	1/10W	R6105	1-216-864-11	SHORT CHIP	0		
R6009	1-218-824-11	METAL CHIP	110	0.5%	1/10W	R6106	1-249-393-11	CARBON	10	5%	1/4W
R6011	1-218-874-11	METAL CHIP	13K	0.5%	1/10W	R6107	1-243-725-71	METAL OXIDE	100K	5%	1W
R6012	1-208-847-11	METAL CHIP	510K	0.5%	1/10W	R6108	1-216-864-11	SHORT CHIP	0		
R6013	1-208-847-11	METAL CHIP	510K	0.5%	1/10W	R6109	1-216-817-11	METAL CHIP	470	5%	1/10W
R6014	1-208-847-11	METAL CHIP	510K	0.5%	1/10W	R6110	1-216-821-11	METAL CHIP	1K	5%	1/10W
R6015	1-208-847-11	METAL CHIP	510K	0.5%	1/10W	R6111	1-216-864-11	SHORT CHIP	0		
R6017	1-216-845-11	METAL CHIP	100K	5%	1/10W	R6112	1-216-839-11	METAL CHIP	33K	5%	1/10W
R6018	1-216-833-11	METAL CHIP	10K	5%	1/10W	R6113	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R6019	1-216-833-11	METAL CHIP	10K	5%	1/10W	R6114	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R6020	1-216-837-11	METAL CHIP	22K	5%	1/10W	< TRANSFORMER >					
R6021	1-218-828-11	METAL CHIP	160	0.5%	1/10W	T6000	Δ 1-443-215-21	POWER TRANSFORMER			
R6022	1-216-837-11	METAL CHIP	22K	5%	1/10W	T6001	Δ 1-443-215-21	POWER TRANSFORMER			
R6023	1-249-393-11	CARBON	10	5%	1/4W	T6100	Δ 1-443-312-11	TRANSFORMER, CONVERTER (SBT)			
R6024	1-249-393-11	CARBON	10	5%	1/4W						
R6025	1-216-833-11	METAL CHIP	10K	5%	1/10W	VR6000	Δ 1-804-995-11	VARISTOR			
R6026	1-216-833-11	METAL CHIP	10K	5%	1/10W	* A-1057-430-A H1 Board Complete					
R6027	1-216-821-11	METAL CHIP	1K	5%	1/10W	< CAPACITOR >					
R6028	1-216-864-11	SHORT CHIP	0			C9000	1-164-156-11	CERAMIC CHIP 0.1UF		25V	
R6029	1-216-817-11	METAL CHIP	470	5%	1/10W	C9001	1-164-156-11	CERAMIC CHIP 0.1UF		25V	
R6031	1-216-864-11	SHORT CHIP	0			< CONNECTOR >					
R6032	1-216-837-11	METAL CHIP	22K	5%	1/10W	CN9000	1-580-057-11	PIN, CONNECTOR (SMD) 4P			
R6033	1-216-837-11	METAL CHIP	22K	5%	1/10W						
R6034	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R6035	1-216-822-11	METAL CHIP	1.2K	5%	1/10W						

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
< DIODE >				< CONNECTOR >			
D9000	8-719-069-55	DIODE UDZSTE-175.6B		CN3700	*1-770-130-11	CONNECTOR (SQUARE TYPE) 21P	
D9001	8-719-069-55	DIODE UDZSTE-175.6B		CN3702	1-580-057-11	PIN, CONNECTOR (SMD) 4P	
< RESISTOR >				CN3703	1-774-769-11	CONNECTOR, FFC/FPC 25P	
R9000	1-216-829-11	METAL CHIP 4.7K 5% 1/10W		< DIODE >			
R9001	1-216-833-11	METAL CHIP 10K 5% 1/10W		D2700	8-719-069-60	DIODE UDZSTE-179.1B	
R9002	1-216-837-11	METAL CHIP 22K 5% 1/10W		D2701	8-719-069-60	DIODE UDZSTE-179.1B	
R9004	1-216-864-11	SHORT CHIP 0		D2702	8-719-069-60	DIODE UDZSTE-179.1B	
R9005	1-216-829-11	METAL CHIP 4.7K 5% 1/10W		D2703	8-719-069-60	DIODE UDZSTE-179.1B	
R9006	1-216-833-11	METAL CHIP 10K 5% 1/10W		D2740	8-719-069-60	DIODE UDZSTE-179.1B	
R9007	1-216-864-11	SHORT CHIP 0		D3700	8-719-069-60	DIODE UDZSTE-179.1B	
R9008	1-216-864-11	SHORT CHIP 0		D3701	8-719-069-60	DIODE UDZSTE-179.1B	
< SWITCH >				D3702	8-719-069-55	DIODE UDZSTE-175.6B	
S9000	1-786-420-11	TACTILE SWITCH		D3703	8-719-083-63	DIODE UDZSTE-1713B	
S9001	1-786-420-11	TACTILE SWITCH		D3710	8-719-069-60	DIODE UDZSTE-179.1B	
S9002	1-786-420-11	TACTILE SWITCH		D3723	8-719-069-60	DIODE UDZSTE-179.1B	
S9003	1-786-420-11	TACTILE SWITCH		D3724	8-719-069-60	DIODE UDZSTE-179.1B	
S9004	1-786-420-11	TACTILE SWITCH		< FERRITE BEAD >			
S9005	1-786-420-11	TACTILE SWITCH		FB3700	1-216-864-11	SHORT CHIP 0	
S9006	1-786-420-11	TACTILE SWITCH		< IC >			
* A-1057-432-A H3 Board Complete				IC3701	6-704-465-01	IC MC74LVX8053DTR2	
< CAPACITOR >				< COIL >			
C2702	1-164-227-11	CERAMIC CHIP 0.022UF 10.00% 25V		L2740	1-412-029-11	INDUCTOR 10UH	
C2703	1-162-964-11	CERAMIC CHIP 0.001UF 10.00% 50V		L3701	1-412-029-11	INDUCTOR 10UH	
C2704	1-164-227-11	CERAMIC CHIP 0.022UF 10.00% 25V		L3703	1-412-029-11	INDUCTOR 10UH	
C2705	1-162-964-11	CERAMIC CHIP 0.001UF 10.00% 50V		L3706	1-412-029-11	INDUCTOR 10UH	
C2706	1-165-908-11	CERAMIC CHIP 1UF 10% 10V		< TRANSISTOR >			
C2707	1-165-908-11	CERAMIC CHIP 1UF 10% 10V		Q2700	8-729-010-29	TRANSISTOR MSD601-RST1	
C2708	1-126-396-11	ELECT CHIP 47UF 20.00% 16V		Q2701	8-729-010-29	TRANSISTOR MSD601-RST1	
C2709	1-126-396-11	ELECT CHIP 47UF 20.00% 16V		Q3701	8-729-010-29	TRANSISTOR MSD601-RST1	
C2740	1-126-396-11	ELECT CHIP 47UF 20.00% 16V		Q3702	8-729-010-29	TRANSISTOR MSD601-RST1	
C2741	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V		Q3707	8-729-010-29	TRANSISTOR MSD601-RST1	
C3701	1-162-962-11	CERAMIC CHIP 470PF 10.00% 50V		Q3708	8-729-010-29	TRANSISTOR MSD601-RST1	
C3714	1-126-394-11	ELECT CHIP 10UF 20.00% 16V		Q3709	8-729-010-29	TRANSISTOR MSD601-RST1	
C3730	1-107-826-11	CERAMIC CHIP 0.1UF 10.00% 16V		< RESISTOR >			
C3732	1-126-396-11	ELECT CHIP 47UF 20.00% 16V		R2700	1-216-815-11	METAL CHIP 330 5% 1/10W	
C3738	1-107-826-11	CERAMIC CHIP 0.1UF 10.00% 16V		R2701	1-216-815-11	METAL CHIP 330 5% 1/10W	
C3739	1-126-396-11	ELECT CHIP 47UF 20.00% 16V		R2702	1-216-049-11	RES-CHIP 1K 5% 1/10W	
C3744	1-126-396-11	ELECT CHIP 47UF 20.00% 16V		R2703	1-216-049-11	RES-CHIP 1K 5% 1/10W	
C3745	1-107-826-11	CERAMIC CHIP 0.1UF 10.00% 16V		R2704	1-216-813-11	METAL CHIP 220 5% 1/10W	
C3746	1-126-394-11	ELECT CHIP 10UF 20.00% 16V		R2705	1-216-864-11	SHORT CHIP 0	
C3747	1-107-826-11	CERAMIC CHIP 0.1UF 10.00% 16V		R2706	1-216-813-11	METAL CHIP 220 5% 1/10W	
C3748	1-126-396-11	ELECT CHIP 47UF 20.00% 16V					
C3749	1-107-826-11	CERAMIC CHIP 0.1UF 10.00% 16V					
C3750	1-126-396-11	ELECT CHIP 47UF 20.00% 16V					
C3751	1-107-826-11	CERAMIC CHIP 0.1UF 10.00% 16V					

REF.NO.	PART.NO	DESCRIPTION	REMARK		
R2707	1-216-864-11	SHORT CHIP	0		
R2708	1-216-853-11	METAL CHIP	470K	5%	1/10W
R2709	1-216-853-11	METAL CHIP	470K	5%	1/10W
R2710	1-216-853-11	METAL CHIP	470K	5%	1/10W
R2711	1-216-853-11	METAL CHIP	470K	5%	1/10W
R2712	1-216-839-11	METAL CHIP	33K	5%	1/10W
R2713	1-216-836-11	METAL CHIP	18K	5%	1/10W
R2714	1-216-839-11	METAL CHIP	33K	5%	1/10W
R2715	1-216-836-11	METAL CHIP	18K	5%	1/10W
R2718	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R2719	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R3701	1-216-029-00	RES-CHIP	150	5%	1/10W
R3702	1-216-022-00	RES-CHIP	75	5%	1/10W
R3703	1-216-025-11	RES-CHIP	100	5%	1/10W
R3704	1-216-864-11	SHORT CHIP	0		
R3705	1-216-864-11	SHORT CHIP	0		
R3706	1-216-864-11	SHORT CHIP	0		
R3707	1-216-864-11	SHORT CHIP	0		
R3708	1-216-864-11	SHORT CHIP	0		
R3709	1-216-025-11	RES-CHIP	100	5%	1/10W
R3710	1-216-864-11	SHORT CHIP	0		
R3711	1-216-864-11	SHORT CHIP	0		
R3712	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3713	1-216-864-11	SHORT CHIP	0		
R3714	1-216-864-11	SHORT CHIP	0		
R3715	1-216-864-11	SHORT CHIP	0		
R3716	1-216-864-11	SHORT CHIP	0		
R3717	1-216-029-00	RES-CHIP	150	5%	1/10W
R3721	1-216-022-00	RES-CHIP	75	5%	1/10W
R3722	1-216-022-00	RES-CHIP	75	5%	1/10W
R3726	1-216-022-00	RES-CHIP	75	5%	1/10W
R3743	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3744	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3752	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R3753	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3773	1-216-839-11	METAL CHIP	33K	5%	1/10W
R3774	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3776	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R3777	1-216-022-00	RES-CHIP	75	5%	1/10W
R3778	1-216-022-00	RES-CHIP	75	5%	1/10W
R3779	1-216-025-11	RES-CHIP	100	5%	1/10W
R3780	1-216-025-11	RES-CHIP	100	5%	1/10W
R3781	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3782	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3784	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R3785	1-216-839-11	METAL CHIP	33K	5%	1/10W
R3786	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3788	1-216-824-11	METAL CHIP	1.8K	5%	1/10W

REF.NO.	PART.NO	DESCRIPTION	REMARK		
* A-1057-434-A H5 Board Complete					
< CAPACITOR >					
C9050	1-128-589-11	ELECT CHIP	47UF	20.00%	6.3V
C9051	1-119-667-11	CERAMIC CHIP	22UF		10V
C9052	1-162-966-11	CERAMIC CHIP	0.0022UF	10.00%	50V
C9053	1-100-566-91	CERAMIC CHIP	0.1UF	10.00%	25V
< CONNECTOR >					
CN9050	*1-580-789-22	PIN, CONNECTOR (SMD) 6P			
< DIODE >					
D9050	8-719-069-55	DIODE UDZSTE-175.6B			
D9051	8-719-060-27	DIODE SLR-325MCT31			
D9052	8-719-053-43	DIODE SLR-325VCT31			
D9053	8-719-069-55	DIODE UDZSTE-175.6B			
< IC >					
IC9050	8-759-515-60	IC RS20			
< RESISTOR >					
R9050	1-216-864-11	SHORT CHIP	0		
R9051	1-216-805-11	METAL CHIP	47	5%	1/10W
* A-1068-279-A A Board Complete					
	4-382-854-01	SCREW (M3X8) , P, SW (+)			
< CAPACITOR >					
C0001	1-126-396-11	ELECT CHIP	47UF	20.00%	16V
C0002	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C0003	1-126-394-11	ELECT CHIP	10UF	20.00%	16V
C0011	1-126-394-11	ELECT CHIP	10UF	20.00%	16V
C0030	1-126-396-11	ELECT CHIP	47UF	20.00%	16V
C0031	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C0032	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C1101	1-162-921-11	CERAMIC CHIP	33PF	5.00%	50V
C1104	1-162-925-11	CERAMIC CHIP	68PF	5.00%	50V
C1105	1-162-925-11	CERAMIC CHIP	68PF	5.00%	50V
C1106	1-126-964-11	ELECT	10UF	20.00%	50V
C1107	1-162-921-11	CERAMIC CHIP	33PF	5.00%	50V
C1108	1-162-968-11	CERAMIC CHIP	0.0047UF	10.00%	50V
C1109	1-162-921-11	CERAMIC CHIP	33PF	5.00%	50V
C1110	1-126-396-11	ELECT CHIP	47UF	20.00%	16V
C1111	1-162-921-11	CERAMIC CHIP	33PF	5.00%	50V
C1200	1-127-573-11	CERAMIC CHIP	1UF	10%	16V
C1201	1-162-966-11	CERAMIC CHIP	0.0022UF	10.00%	50V
C1202	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C1203	1-162-927-11	CERAMIC CHIP	100PF	5.00%	50V

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
C1204	1-127-573-11	CERAMIC CHIP 1UF	10% 16V	C2311	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C1205	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V	C2312	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C1207	1-126-396-11	ELECT CHIP 47UF	20.00% 16V	C2313	1-127-573-11	CERAMIC CHIP 1UF	10% 16V
C1300	1-126-394-11	ELECT CHIP 10UF	20.00% 16V	C2400	1-162-923-11	CERAMIC CHIP 47PF	5.00% 50V
C1301	1-126-396-11	ELECT CHIP 47UF	20.00% 16V	C2401	1-162-923-11	CERAMIC CHIP 47PF	5.00% 50V
C1302	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	C2402	1-162-923-11	CERAMIC CHIP 47PF	5.00% 50V
C2000	1-125-889-91	CERAMIC CHIP 2.2UF	10% 10V	C2403	1-162-923-11	CERAMIC CHIP 47PF	5.00% 50V
C2001	1-125-889-91	CERAMIC CHIP 2.2UF	10% 10V	C2404	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2002	1-126-396-11	ELECT CHIP 47UF	20.00% 16V	C2405	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2003	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C2406	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2005	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V	C2407	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C2006	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C2410	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V
C2007	1-107-823-11	CERAMIC CHIP 0.47UF	10% 16V	C2411	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V
C2009	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V	C2413	1-125-889-91	CERAMIC CHIP 2.2UF	10% 10V
C2010	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V	C2414	1-125-889-91	CERAMIC CHIP 2.2UF	10% 10V
C2011	1-107-823-11	CERAMIC CHIP 0.47UF	10% 16V	C2500	1-127-573-11	CERAMIC CHIP 1UF	10% 16V
C2013	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V	C2501	1-127-573-11	CERAMIC CHIP 1UF	10% 16V
C2014	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V	C2502	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2015	1-162-906-11	CERAMIC CHIP 1.5PF	0.25PF 50V	C2507	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2016	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V	C2508	1-128-526-11	ELECT 100UF	20.00% 25V
C2017	1-162-906-11	CERAMIC CHIP 1.5PF	0.25PF 50V	C2510	1-127-573-11	CERAMIC CHIP 1UF	10% 16V
C2018	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V	C2511	1-107-914-11	ELECT 1000UF	20.00% 50V
C2019	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C2512	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C2020	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C2513	1-107-914-11	ELECT 1000UF	20.00% 50V
C2021	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V	C2514	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C2023	1-126-394-11	ELECT CHIP 10UF	20.00% 16V	C2515	1-126-971-11	ELECT 470UF	20.00% 50V
C2024	1-126-394-11	ELECT CHIP 10UF	20.00% 16V	C2516	1-126-971-11	ELECT 470UF	20.00% 50V
C2025	1-126-396-11	ELECT CHIP 47UF	20.00% 16V	C2600	1-127-573-11	CERAMIC CHIP 1UF	10% 16V
C2026	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C2601	1-127-573-11	CERAMIC CHIP 1UF	10% 16V
C2027	1-126-394-11	ELECT CHIP 10UF	20.00% 16V	C2602	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2028	1-126-396-11	ELECT CHIP 47UF	20.00% 16V	C2603	1-164-156-11	CERAMIC CHIP 0.1UF	25V
C2029	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C2604	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V
C2030	1-126-394-11	ELECT CHIP 10UF	20.00% 16V	C2605	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V
C2032	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C2620	1-164-227-11	CERAMIC CHIP 0.022UF	10.00% 25V
C2033	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C2621	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
C2036	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V	C2622	1-164-227-11	CERAMIC CHIP 0.022UF	10.00% 25V
C2037	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V	C2623	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
C2100	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V	C2624	1-165-908-11	CERAMIC CHIP 1UF	10% 10V
C2102	1-216-864-11	SHORT CHIP 0		C2625	1-165-908-11	CERAMIC CHIP 1UF	10% 10V
C2103	1-162-928-11	CERAMIC CHIP 120PF	5.00% 50V	C2626	1-126-947-11	ELECT 47UF	20.00% 35V
C2105	1-125-891-11	CERAMIC CHIP 0.47UF	10.00% 10V	C2627	1-126-947-11	ELECT 47UF	20.00% 35V
C2200	1-104-665-11	ELECT 100UF	20.00% 25V	C3603	1-126-947-11	ELECT 47UF	20.00% 35V
C2201	1-125-889-91	CERAMIC CHIP 2.2UF	10% 10V	C3608	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C2203	1-125-889-91	CERAMIC CHIP 2.2UF	10% 10V	C3801	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C2250	1-127-861-11	CERAMIC CHIP 2.2UF	10% 16V	C3802	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2300	1-126-935-11	ELECT 470UF	20.00% 16V	C3806	1-126-396-11	ELECT CHIP 47UF	20.00% 16V
C2301	1-126-396-11	ELECT CHIP 47UF	20.00% 16V	C3807	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C2304	1-126-396-11	ELECT CHIP 47UF	20.00% 16V	C3808	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C2309	1-126-396-11	ELECT CHIP 47UF	20.00% 16V	C3809	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C2310	1-126-396-11	ELECT CHIP 47UF	20.00% 16V	C3810	1-125-889-91	CERAMIC CHIP 2.2UF	10% 10V

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
C3811	1-164-227-11	CERAMIC CHIP 0.022UF	10.00% 25V	CN0042	*1-564-508-11	PLUG, CONNECTOR 5P	
C3812	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	CN0043	1-793-358-21	PIN (PWB) (30P), CONNECTOR	
C3814	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	CN2211	*1-766-376-11	PIN, CONNECTOR (1.5MM) (SMD) 9P	
C3816	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V	CN2500	*1-564-507-11	PLUG, CONNECTOR 4P	
C3820	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	CN3602	*1-770-130-11	CONNECTOR (SQUARE TYPE) 21P	
C3821	1-162-914-11	CERAMIC CHIP 9PF	0.50PF 50V	CN3621	1-774-769-11	CONNECTOR, FFC/FPC 25P	
C3822	1-126-394-11	ELECT CHIP 10UF	20.00% 16V	CN6201	1-573-290-21	PIN, CONNECTOR (1.5MM) (SMD) 4P	
C3823	1-126-396-11	ELECT CHIP 47UF	20.00% 16V	CN6202	1-573-806-21	PIN, CONNECTOR (1.5MM) (SMD) 6P	
C3824	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	CN6204	1-794-032-21	PIN, CONNECTOR (PC BOARD) 11P	
C3825	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	< DIODE >			
C3826	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	D1200	8-719-081-97	DIODE MMDL914T1	
C3827	1-126-396-11	ELECT CHIP 47UF	20.00% 16V	D2001	8-719-069-60	DIODE UDZSTE-179.1B	
C3828	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	D2200	8-719-081-97	DIODE MMDL914T1	
C3829	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	D2201	8-719-081-97	DIODE MMDL914T1	
C3830	1-126-396-11	ELECT CHIP 47UF	20.00% 16V	D2203	8-719-081-97	DIODE MMDL914T1	
C3831	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	D2204	8-719-081-97	DIODE MMDL914T1	
C3832	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	D2205	8-719-081-97	DIODE MMDL914T1	
C3833	1-127-760-11	CERAMIC CHIP 4.7UF	10% 6.3V	D2400	8-719-069-60	DIODE UDZSTE-179.1B	
C3835	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	D2401	8-719-069-60	DIODE UDZSTE-179.1B	
C3836	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	D2402	8-719-081-97	DIODE MMDL914T1	
C3837	1-126-396-11	ELECT CHIP 47UF	20.00% 16V	D2500	6-500-253-01	DIODE RB053L-30TE25	
C3838	1-126-396-11	ELECT CHIP 47UF	20.00% 16V	D2600	8-719-069-60	DIODE UDZSTE-179.1B	
C3841	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V	D2604	8-719-069-60	DIODE UDZSTE-179.1B	
C6200	1-162-974-11	CERAMIC CHIP 0.01UF	50V	D2605	8-719-069-60	DIODE UDZSTE-179.1B	
C6201	1-162-974-11	CERAMIC CHIP 0.01UF	50V	D2606	8-719-069-60	DIODE UDZSTE-179.1B	
C6204	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	D2607	8-719-069-60	DIODE UDZSTE-179.1B	
C6205	1-162-974-11	CERAMIC CHIP 0.01UF	50V	D3601	8-719-069-55	DIODE UDZSTE-175.6B	
C6207	1-162-974-11	CERAMIC CHIP 0.01UF	50V	D3626	8-719-069-60	DIODE UDZSTE-179.1B	
C6209	1-162-974-11	CERAMIC CHIP 0.01UF	50V	D3627	8-719-083-63	DIODE UDZSTE-1713B	
C6210	1-162-974-11	CERAMIC CHIP 0.01UF	50V	D3628	8-719-069-55	DIODE UDZSTE-175.6B	
C6211	1-162-974-11	CERAMIC CHIP 0.01UF	50V	D3629	8-719-069-55	DIODE UDZSTE-175.6B	
C6216	1-162-974-11	CERAMIC CHIP 0.01UF	50V	D3630	8-719-069-60	DIODE UDZSTE-179.1B	
C6218	1-162-974-11	CERAMIC CHIP 0.01UF	50V	D3631	8-719-069-55	DIODE UDZSTE-175.6B	
C6226	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V	D3634	8-719-069-60	DIODE UDZSTE-179.1B	
C6227	1-104-665-11	ELECT 100UF	20.00% 25V	D6202	8-719-081-97	DIODE MMDL914T1	
C6228	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	D6204	8-719-081-97	DIODE MMDL914T1	
C6230	1-126-940-11	ELECT 330UF	20.00% 25V	D6205	8-719-081-34	DIODE RB160M-30TR	
C6237	1-100-566-91	CERAMIC CHIP 0.1UF	10.00% 25V	D6209	8-719-036-94	DIODE RD5.6SB-T1	
C6238	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V	D6217	8-719-081-97	DIODE MMDL914T1	
C6239	1-104-665-11	ELECT 100UF	20.00% 25V	< FERRITE BEAD >			
C6242	1-126-935-11	ELECT 470UF	20.00% 16V	FB1101	1-216-864-11	SHORT CHIP 0	
C6246	1-100-566-91	CERAMIC CHIP 0.1UF	10.00% 25V	FB2200	1-469-324-21	FERRITE 0UH	
C6267	1-126-947-11	ELECT 47UF	20.00% 35V	FB2500	1-469-324-21	FERRITE 0UH	
C6269	1-100-566-91	CERAMIC CHIP 0.1UF	10.00% 25V	FB2501	1-469-324-21	FERRITE 0UH	
C6270	1-162-995-11	CERAMIC CHIP 0.022UF	50V	FB3609	1-216-864-11	SHORT CHIP 0	
C6271	1-126-963-11	ELECT 4.7UF	20.00% 50V	FB6200	1-216-295-91	SHORT CHIP 0	
C6272	1-126-967-11	ELECT 47UF	20.00% 50V	FB6203	1-216-295-91	SHORT CHIP 0	
< CONNECTOR >				FB6204	1-216-295-91	SHORT CHIP 0	
CN0041	1-573-806-21	PIN, CONNECTOR (1.5MM) (SMD) 6P		FB6208	1-414-864-11	FERRITE 0UH	

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

A

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
< IC >				L6202	1-424-918-21	INDUCTOR	10UH
IC0001	8-759-561-69	IC PCF8574TS-T		L6205	1-456-504-21	INDUCTOR	100UH
IC0002	8-759-701-01	IC NJM2904M		L6215	1-410-120-11	INDUCTOR	1.2MH
IC0030	8-759-561-69	IC PCF8574TS-T		< PROTECTOR MODULE >			
IC1200	8-759-514-57	IC BA7046F		PS2500 Δ	1-576-390-91	IC LINK	2.5A 50V
IC2000	6-706-636-01	IC MSP3410G-QA-C12-0001		< TRANSISTOR >			
IC2300	8-759-576-76	IC TDA2822D013TR		Q0001	8-729-010-29	TRANSISTOR MSD601-RST1	
IC2400	8-759-278-58	IC NJM4558V-TE2		Q0002	8-729-028-28	TRANSISTOR 2SK2036 (TE85L)	
IC2500	8-759-246-70	IC TA8216H		Q0046	8-729-010-29	TRANSISTOR MSD601-RST1	
IC3801	8-752-107-30	IC CXA2163AQ-T6		Q0047	8-729-010-29	TRANSISTOR MSD601-RST1	
IC3811	8-759-481-08	IC TC7SET02FU (TE85R)		Q1100	8-729-010-29	TRANSISTOR MSD601-RST1	
IC6202	6-705-025-01	IC PQ20WZ1UJ00H		Q1200	8-729-010-29	TRANSISTOR MSD601-RST1	
IC6205	6-704-407-01	IC PQ1CZ41H2ZPH		Q1201	8-729-010-05	TRANSISTOR MSB709-RT1	
IC6208	8-749-925-00	IC TK11819MTL		Q1300	8-729-010-29	TRANSISTOR MSD601-RST1	
< SOCKET >				Q1301	8-729-010-05	TRANSISTOR MSB709-RT1	
J2400	1-794-623-11	JACK, PIN 2P		Q2000	8-729-010-29	TRANSISTOR MSD601-RST1	
< COIL >				Q2001	8-729-010-29	TRANSISTOR MSD601-RST1	
L1100	1-414-580-21	INDUCTOR	100NH	Q2002	8-729-010-29	TRANSISTOR MSD601-RST1	
L1101	1-414-760-21	FERRITE	0UH	Q2100	8-729-010-29	TRANSISTOR MSD601-RST1	
L1102	1-414-580-21	INDUCTOR	100NH	Q2101	8-729-010-05	TRANSISTOR MSB709-RT1	
L1103	1-414-760-21	FERRITE	0UH	Q2200	1-801-806-11	TRANSISTOR DTC144EKA	
L1104	1-414-580-21	INDUCTOR	100NH	Q2201	8-729-027-38	TRANSISTOR DTA144EKA-T146	
L1105	1-412-029-11	INDUCTOR	10UH	Q2202	8-729-010-29	TRANSISTOR MSD601-RST1	
L1106	1-412-979-21	INDUCTOR	1UH	Q2203	1-801-806-11	TRANSISTOR DTC144EKA	
L1107	1-412-029-11	INDUCTOR	10UH	Q2204	8-729-010-29	TRANSISTOR MSD601-RST1	
L1200	1-412-029-11	INDUCTOR	10UH	Q2205	8-729-010-29	TRANSISTOR MSD601-RST1	
L1300	1-412-029-11	INDUCTOR	10UH	Q2300	8-729-010-29	TRANSISTOR MSD601-RST1	
L2000	1-412-029-11	INDUCTOR	10UH	Q2301	8-729-010-29	TRANSISTOR MSD601-RST1	
L2001	1-412-029-11	INDUCTOR	10UH	Q2400	8-729-015-39	TRANSISTOR DTC323TK	
L2002	1-412-029-11	INDUCTOR	10UH	Q2401	8-729-015-39	TRANSISTOR DTC323TK	
L2100	1-216-864-11	SHORT CHIP	0	Q2404	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
L2101	1-412-990-41	INDUCTOR	8.2UH	Q2405	8-729-015-39	TRANSISTOR DTC323TK	
L2300	1-412-029-11	INDUCTOR	10UH	Q2406	8-729-015-39	TRANSISTOR DTC323TK	
L2400	1-412-029-11	INDUCTOR	10UH	Q2600	8-729-010-29	TRANSISTOR MSD601-RST1	
L2500	1-406-661-21	INDUCTOR	22UH	Q2601	8-729-010-29	TRANSISTOR MSD601-RST1	
L2600	1-412-029-11	INDUCTOR	10UH	Q3600	8-729-010-29	TRANSISTOR MSD601-RST1	
L3600	1-412-029-11	INDUCTOR	10UH	Q3801	8-729-010-05	TRANSISTOR MSB709-RT1	
L3801	1-412-029-11	INDUCTOR	10UH	Q3806	8-729-010-05	TRANSISTOR MSB709-RT1	
L3802	1-216-864-11	SHORT CHIP	0	Q3807	8-729-010-05	TRANSISTOR MSB709-RT1	
L3803	1-216-864-11	SHORT CHIP	0	Q3808	8-729-010-29	TRANSISTOR MSD601-RST1	
L3804	1-216-864-11	SHORT CHIP	0	Q3809	8-729-010-05	TRANSISTOR MSB709-RT1	
L3805	1-412-029-11	INDUCTOR	10UH	Q6200	8-729-045-62	TRANSISTOR 2SK2158-T2B	
L3806	1-412-029-11	INDUCTOR	10UH	Q6203	8-729-010-29	TRANSISTOR MSD601-RST1	
L3807	1-412-029-11	INDUCTOR	10UH	< RESISTOR >			
L3808	1-412-029-11	INDUCTOR	10UH	JR2200	1-216-864-11	SHORT CHIP	0
L3809	1-412-029-11	INDUCTOR	10UH	JR2300	1-216-864-11	SHORT CHIP	0
L3811	1-412-029-11	INDUCTOR	10UH				

REF.NO.	PART.NO	DESCRIPTION	REMARK			REF.NO.	PART.NO	DESCRIPTION	REMARK		
JR3905	1-216-864-11	SHORT CHIP	0			R0048	1-216-833-11	METAL CHIP	10K	5%	1/10W
JR3906	1-216-864-11	SHORT CHIP	0			R0049	1-216-833-11	METAL CHIP	10K	5%	1/10W
JR3907	1-216-864-11	SHORT CHIP	0			R0050	1-216-833-11	METAL CHIP	10K	5%	1/10W
JR3908	1-216-864-11	SHORT CHIP	0			R0051	1-216-833-11	METAL CHIP	10K	5%	1/10W
JR6201	1-216-295-91	SHORT CHIP	0			R0052	1-216-809-11	METAL CHIP	100	5%	1/10W
JR6211	1-216-295-91	SHORT CHIP	0			R0053	1-216-833-11	METAL CHIP	10K	5%	1/10W
JR6212	1-216-295-91	SHORT CHIP	0			R0054	1-216-811-11	METAL CHIP	150	5%	1/10W
JR6213	1-216-295-91	SHORT CHIP	0			R0055	1-216-864-11	SHORT CHIP	0		
JR6214	1-216-295-91	SHORT CHIP	0			R0056	1-216-809-11	METAL CHIP	100	5%	1/10W
JR6215	1-216-295-91	SHORT CHIP	0			R0057	1-216-833-11	METAL CHIP	10K	5%	1/10W
JR6216	1-216-295-91	SHORT CHIP	0			R1100	1-216-836-11	METAL CHIP	18K	5%	1/10W
JR6217	1-216-295-91	SHORT CHIP	0			R1101	1-216-833-11	METAL CHIP	10K	5%	1/10W
JR6218	1-216-295-91	SHORT CHIP	0			R1102	1-216-864-11	SHORT CHIP	0		
R0001	1-216-864-11	SHORT CHIP	0			R1104	1-216-809-11	METAL CHIP	100	5%	1/10W
R0002	1-216-809-11	METAL CHIP	100	5%	1/10W	R1105	1-216-809-11	METAL CHIP	100	5%	1/10W
R0003	1-216-809-11	METAL CHIP	100	5%	1/10W	R1107	1-216-864-11	SHORT CHIP	0		
R0004	1-216-821-11	METAL CHIP	1K	5%	1/10W	R1108	1-216-864-11	SHORT CHIP	0		
R0005	1-216-809-11	METAL CHIP	100	5%	1/10W	R1109	1-216-864-11	SHORT CHIP	0		
R0006	1-216-864-11	SHORT CHIP	0			R1200	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0007	1-216-864-11	SHORT CHIP	0			R1201	1-216-812-11	METAL CHIP	180	5%	1/10W
R0008	1-216-809-11	METAL CHIP	100	5%	1/10W	R1202	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0009	1-216-809-11	METAL CHIP	100	5%	1/10W	R1203	1-218-898-11	METAL CHIP	130K	0.5%	1/10W
R0010	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1204	1-216-853-11	METAL CHIP	470K	5%	1/10W
R0011	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1205	1-216-850-11	METAL CHIP	270K	5%	1/10W
R0012	1-216-809-11	METAL CHIP	100	5%	1/10W	R1206	1-216-853-11	METAL CHIP	470K	5%	1/10W
R0013	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1207	1-216-853-11	METAL CHIP	470K	5%	1/10W
R0014	1-216-864-11	SHORT CHIP	0			R1208	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0015	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1209	1-216-864-11	SHORT CHIP	0		
R0017	1-218-271-11	METAL CHIP	2K	5%	1/10W	R1301	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R0024	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1302	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R0025	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1303	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0026	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1304	1-216-821-11	METAL CHIP	1K	5%	1/10W
R0027	1-216-809-11	METAL CHIP	100	5%	1/10W	R1305	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R0028	1-216-864-11	SHORT CHIP	0			R1306	1-216-797-11	METAL CHIP	10	5%	1/10W
R0030	1-216-864-11	SHORT CHIP	0			R1307	1-216-864-11	SHORT CHIP	0		
R0031	1-216-809-11	METAL CHIP	100	5%	1/10W	R2000	1-414-760-21	FERRITE	0UH		
R0032	1-216-809-11	METAL CHIP	100	5%	1/10W	R2001	1-414-760-21	FERRITE	0UH		
R0033	1-216-809-11	METAL CHIP	100	5%	1/10W	R2003	1-216-839-11	METAL CHIP	33K	5%	1/10W
R0034	1-216-864-11	SHORT CHIP	0			R2004	1-216-836-11	METAL CHIP	18K	5%	1/10W
R0035	1-216-864-11	SHORT CHIP	0			R2005	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R0036	1-216-864-11	SHORT CHIP	0			R2007	1-216-809-11	METAL CHIP	100	5%	1/10W
R0037	1-216-809-11	METAL CHIP	100	5%	1/10W	R2008	1-216-839-11	METAL CHIP	33K	5%	1/10W
R0038	1-216-809-11	METAL CHIP	100	5%	1/10W	R2009	1-216-836-11	METAL CHIP	18K	5%	1/10W
R0039	1-216-809-11	METAL CHIP	100	5%	1/10W	R2011	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R0040	1-216-864-11	SHORT CHIP	0			R2012	1-216-845-11	METAL CHIP	100K	5%	1/10W
R0041	1-216-833-11	METAL CHIP	10K	5%	1/10W	R2013	1-216-864-11	SHORT CHIP	0		
R0042	1-216-809-11	METAL CHIP	100	5%	1/10W	R2014	1-216-864-11	SHORT CHIP	0		
R0043	1-216-813-11	METAL CHIP	220	5%	1/10W	R2015	1-216-833-11	METAL CHIP	10K	5%	1/10W
R0047	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R2016	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
						R2017	1-216-829-11	METAL CHIP	4.7K	5%	1/10W

REF.NO.	PART.NO	DESCRIPTION	REMARK			REF.NO.	PART.NO	DESCRIPTION	REMARK		
R2018	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2425	1-216-841-11	METAL CHIP	47K	5%	1/10W
R2019	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2426	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2021	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2427	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2022	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2428	1-216-864-11	SHORT CHIP	0		
R2031	1-216-845-11	METAL CHIP	100K	5%	1/10W	R2429	1-216-864-11	SHORT CHIP	0		
R2102	1-216-805-11	METAL CHIP	47	5%	1/10W	R2430	1-216-864-11	SHORT CHIP	0		
R2103	1-216-821-11	METAL CHIP	1K	5%	1/10W	R2431	1-216-864-11	SHORT CHIP	0		
R2106	1-216-821-11	METAL CHIP	1K	5%	1/10W	R2500	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2159	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2501	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2200	1-216-833-11	METAL CHIP	10K	5%	1/10W	R2502	1-216-864-11	SHORT CHIP	0		
R2201	1-216-833-11	METAL CHIP	10K	5%	1/10W	R2503	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R2203	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R2505	1-216-864-11	SHORT CHIP	0		
R2204	1-216-864-11	SHORT CHIP	0			R2506	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R2205	1-216-864-11	SHORT CHIP	0			R2508	1-216-296-11	SHORT CHIP	0		
R2206	1-216-833-11	METAL CHIP	10K	5%	1/10W	R2510	1-216-864-11	SHORT CHIP	0		
R2208	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2511	1-216-296-11	SHORT CHIP	0		
R2209	1-216-833-11	METAL CHIP	10K	5%	1/10W	R2512	1-220-230-11	RES-CHIP	2.2	10%	1/4W
R2210	1-216-809-11	METAL CHIP	100	5%	1/10W	R2513	1-220-230-11	RES-CHIP	2.2	10%	1/4W
R2255	1-216-821-11	METAL CHIP	1K	5%	1/10W	R2614	1-216-864-11	SHORT CHIP	0		
R2256	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R2615	1-216-864-11	SHORT CHIP	0		
R2303	1-216-809-11	METAL CHIP	100	5%	1/10W	R2618	1-216-864-11	SHORT CHIP	0		
R2305	1-216-809-11	METAL CHIP	100	5%	1/10W	R2619	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R2306	1-216-805-11	METAL CHIP	47	5%	1/10W	R2620	1-216-836-11	METAL CHIP	18K	5%	1/10W
R2307	1-216-805-11	METAL CHIP	47	5%	1/10W	R2622	1-216-839-11	METAL CHIP	33K	5%	1/10W
R2308	1-216-833-11	METAL CHIP	10K	5%	1/10W	R2623	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R2309	1-216-833-11	METAL CHIP	10K	5%	1/10W	R2624	1-216-815-11	METAL CHIP	330	5%	1/10W
R2310	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2625	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2311	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2626	1-216-815-11	METAL CHIP	330	5%	1/10W
R2314	1-216-809-11	METAL CHIP	100	5%	1/10W	R2627	1-216-049-11	RES-CHIP	1K	5%	1/10W
R2315	1-216-813-11	METAL CHIP	220	5%	1/10W	R2628	1-216-813-11	METAL CHIP	220	5%	1/10W
R2316	1-216-809-11	METAL CHIP	100	5%	1/10W	R2629	1-216-864-11	SHORT CHIP	0		
R2317	1-216-813-11	METAL CHIP	220	5%	1/10W	R2630	1-216-813-11	METAL CHIP	220	5%	1/10W
R2318	1-216-809-11	METAL CHIP	100	5%	1/10W	R2631	1-216-864-11	SHORT CHIP	0		
R2319	1-216-809-11	METAL CHIP	100	5%	1/10W	R2632	1-216-853-11	METAL CHIP	470K	5%	1/10W
R2400	1-216-815-11	METAL CHIP	330	5%	1/10W	R2633	1-216-853-11	METAL CHIP	470K	5%	1/10W
R2401	1-216-815-11	METAL CHIP	330	5%	1/10W	R2634	1-216-853-11	METAL CHIP	470K	5%	1/10W
R2402	1-216-841-11	METAL CHIP	47K	5%	1/10W	R2635	1-216-853-11	METAL CHIP	470K	5%	1/10W
R2403	1-216-841-11	METAL CHIP	47K	5%	1/10W	R2636	1-216-864-11	SHORT CHIP	0		
R2404	1-216-864-11	SHORT CHIP	0			R2652	1-216-864-11	SHORT CHIP	0		
R2411	1-216-864-11	SHORT CHIP	0			R2662	1-216-836-11	METAL CHIP	18K	5%	1/10W
R2412	1-216-853-11	METAL CHIP	470K	5%	1/10W	R2663	1-216-839-11	METAL CHIP	33K	5%	1/10W
R2413	1-216-864-11	SHORT CHIP	0			R3600	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2414	1-216-864-11	SHORT CHIP	0			R3601	1-216-809-11	METAL CHIP	100	5%	1/10W
R2415	1-216-845-11	METAL CHIP	100K	5%	1/10W	R3603	1-216-025-11	RES-CHIP	100	5%	1/10W
R2416	1-216-837-11	METAL CHIP	22K	5%	1/10W	R3613	1-216-022-00	RES-CHIP	75	5%	1/10W
R2417	1-216-845-11	METAL CHIP	100K	5%	1/10W	R3614	1-216-025-11	RES-CHIP	100	5%	1/10W
R2420	1-216-837-11	METAL CHIP	22K	5%	1/10W	R3615	1-216-022-00	RES-CHIP	75	5%	1/10W
R2421	1-216-837-11	METAL CHIP	22K	5%	1/10W	R3616	1-216-022-00	RES-CHIP	75	5%	1/10W
R2423	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3617	1-216-022-00	RES-CHIP	75	5%	1/10W
R2424	1-216-841-11	METAL CHIP	47K	5%	1/10W	R3618	1-216-029-00	RES-CHIP	150	5%	1/10W

REF.NO.	PART.NO	DESCRIPTION	REMARK			REF.NO.	PART.NO	DESCRIPTION	REMARK					
R3619	1-216-025-11	RES-CHIP	100	5%	1/10W	TU1100	8-597-936-00	< TUNER >						
R3621	1-216-025-11	RES-CHIP	100	5%	1/10W			TUNER, FSS BTF-EF411Z						
R3622	1-216-025-11	RES-CHIP	100	5%	1/10W			< VARISTOR >						
R3623	1-216-025-11	RES-CHIP	100	5%	1/10W			VD2500 1-801-925-21 VARISTOR, CHIP (1608)						
R3624	1-216-022-00	RES-CHIP	75	5%	1/10W			VD2501 1-801-925-21 VARISTOR, CHIP (1608)						
R3625	1-216-025-11	RES-CHIP	100	5%	1/10W	VD2502 1-801-925-21 VARISTOR, CHIP (1608)								
R3626	1-216-029-00	RES-CHIP	150	5%	1/10W	< CRYSTAL >								
R3811	1-216-809-11	METAL CHIP	100	5%	1/10W	X2000	1-795-612-11	VIBRATOR, CRYSTAL						
R3812	1-216-809-11	METAL CHIP	100	5%	1/10W			X3800	1-781-914-21	VIBRATOR, CRYSTAL				
R3813	1-216-864-11	SHORT CHIP	0			* A-1068-281-A H2 Board Complete								
R3814	1-218-851-11	METAL CHIP	1.5K	0.5%	1/10W	< CAPACITOR >								
R3818	1-216-864-11	SHORT CHIP	0			C9202	1-126-401-21	ELECT CHIP 1UF	20.00%	50V				
R3822	1-216-821-11	METAL CHIP	1K	5%	1/10W							C9206	1-126-401-21	ELECT CHIP 1UF
R3833	1-216-821-11	METAL CHIP	1K	5%	1/10W	C9208	1-162-970-11	CERAMIC CHIP 0.01UF	10.00%	25V				
R3835	1-216-828-11	METAL CHIP	3.9K	5%	1/10W						C9213	1-162-970-11	CERAMIC CHIP 0.01UF	10.00%
R3836	1-216-838-11	METAL CHIP	27K	5%	1/10W	< CONNECTOR >								
R3841	1-216-821-11	METAL CHIP	1K	5%	1/10W	CN9200	*1-766-376-11	PIN, CONNECTOR (1.5MM) (SMD) 9P						
R3842	1-216-821-11	METAL CHIP	1K	5%	1/10W			CN9300	1-573-290-21	PIN, CONNECTOR (1.5MM) (SMD) 4P				
R3843	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W	< DIODE >								
R3844	1-216-821-11	METAL CHIP	1K	5%	1/10W	D9200	8-719-069-60	DIODE UDZSTE-179.1B						
R3845	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W			D9201	8-719-069-60	DIODE UDZSTE-179.1B				
R3847	1-216-809-11	METAL CHIP	100	5%	1/10W	D9300	8-719-978-33			DIODE DTZ-TT11-6.8B				
R3852	1-216-809-11	METAL CHIP	100	5%	1/10W			D9301	8-719-978-33	DIODE DTZ-TT11-6.8B				
R3855	1-216-864-11	SHORT CHIP	0			< SOCKET >								
R3856	1-216-809-11	METAL CHIP	100	5%	1/10W	J9201	1-750-264-31	JACK						
R3863	1-216-809-11	METAL CHIP	100	5%	1/10W			J9300	1-770-054-11	TERMINAL BLOCK, S(LIGHT ANGLE)				
R3864	1-216-809-11	METAL CHIP	100	5%	1/10W	< COIL >								
R3866	1-216-809-11	METAL CHIP	100	5%	1/10W	L9202	1-216-864-11	SHORT CHIP	0					
R3867	1-216-825-11	METAL CHIP	2.2K	5%	1/10W							L9203	1-216-864-11	SHORT CHIP
R3868	1-216-815-11	METAL CHIP	330	5%	1/10W	L9204	1-216-864-11	SHORT CHIP	0					
R3869	1-216-825-11	METAL CHIP	2.2K	5%	1/10W					L9205	1-216-864-11	SHORT CHIP	0	
R3870	1-211-985-11	METAL CHIP	47	0.5%	1/10W	L9206	1-216-864-11	SHORT CHIP	0					
R3872	1-216-864-11	SHORT CHIP	0							< RESISTOR >				
R3873	1-216-864-11	SHORT CHIP	0			R9200	1-216-853-11	METAL CHIP	470K	5%	1/10W			
R3874	1-216-864-11	SHORT CHIP	0									R9201	1-216-864-11	SHORT CHIP
R3875	1-216-864-11	SHORT CHIP	0			R9202	1-216-821-11	METAL CHIP	1K	5%	1/10W			
R3876	1-216-864-11	SHORT CHIP	0									R9203	1-216-821-11	METAL CHIP
R6202	1-216-833-11	METAL CHIP	10K	5%	1/10W	R9204	1-216-864-11	SHORT CHIP	0					
R6204	1-216-295-91	SHORT CHIP	0							R9205	1-216-853-11	METAL CHIP	470K	5%
R6205	1-216-849-11	METAL CHIP	220K	5%	1/10W	R9208	1-216-864-11	SHORT CHIP	0					
R6206	1-216-833-11	METAL CHIP	10K	5%	1/10W					< TUNER >				
R6210	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	TU1100	8-597-936-00	TUNER, FSS BTF-EF411Z						
R6211	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W			< VARISTOR >						
R6224	1-218-850-11	METAL CHIP	1.3K	0.5%	1/10W	VD2500	1-801-925-21	VARISTOR, CHIP (1608)						
R6225	1-218-861-11	METAL CHIP	3.9K	0.5%	1/10W				VD2501	1-801-925-21	VARISTOR, CHIP (1608)			
R6229	1-216-295-91	SHORT CHIP	0											
R6257	1-216-808-11	METAL CHIP	82	5%	1/10W	VD2502			1-801-925-21	VARISTOR, CHIP (1608)	< CRYSTAL >			
R6258	1-216-295-91	SHORT CHIP	0				X2000	1-795-612-11			VIBRATOR, CRYSTAL			
						X3800			1-781-914-21	VIBRATOR, CRYSTAL				
						* A-1068-281-A H2 Board Complete								
						< CAPACITOR >								
						C9202	1-126-401-21	ELECT CHIP 1UF	20.00%	50V				
						C9206	1-126-401-21	ELECT CHIP 1UF	20.00%	50V				
						C9208	1-162-970-11	CERAMIC CHIP 0.01UF	10.00%	25V				
						C9213	1-162-970-11	CERAMIC CHIP 0.01UF	10.00%	25V				
						< CONNECTOR >								
						CN9200	*1-766-376-11	PIN, CONNECTOR (1.5MM) (SMD) 9P						
								CN9300	1-573-290-21	PIN, CONNECTOR (1.5MM) (SMD) 4P				
						< DIODE >								
						D9200	8-719-069-60	DIODE UDZSTE-179.1B						
								D9201	8-719-069-60	DIODE UDZSTE-179.1B				
						D9300	8-719-978-33			DIODE DTZ-TT11-6.8B				
								D9301	8-719-978-33	DIODE DTZ-TT11-6.8B				
						< SOCKET >								
						J9201	1-750-264-31	JACK						
								J9300	1-770-054-11	TERMINAL BLOCK, S(LIGHT ANGLE)				
						< COIL >								
						L9202	1-216-864-11	SHORT CHIP	0					
												L9203	1-216-864-11	SHORT CHIP
						L9204	1-216-864-11	SHORT CHIP	0					
										L9205	1-216-864-11	SHORT CHIP	0	
						L9206	1-216-864-11	SHORT CHIP	0					
										< RESISTOR >				
						R9200	1-216-853-11	METAL CHIP	470K	5%	1/10W			
												R9201	1-216-864-11	SHORT CHIP
						R9202	1-216-821-11	METAL CHIP	1K	5%	1/10W			
												R9203	1-216-821-11	METAL CHIP
						R9204	1-216-864-11	SHORT CHIP	0					
										R9205	1-216-853-11	METAL CHIP	470K	5%
						R9208	1-216-864-11	SHORT CHIP	0					

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

H2

REF.NO.	PART.NO	DESCRIPTION	REMARK
R9209	1-216-810-11	METAL CHIP	120 5% 1/10W
R9210	1-216-810-11	METAL CHIP	120 5% 1/10W
R9211	1-216-810-11	METAL CHIP	120 5% 1/10W
R9212	1-216-810-11	METAL CHIP	120 5% 1/10W
R9213	1-216-864-11	SHORT CHIP	0

REF.NO.	PART.NO	DESCRIPTION	REMARK
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MISCELLANEOUS

1-825-959-11	LOUDSPEAKER (4X7CM)
8-597-936-00	TUNER, FSS BTF-EF411Z
1-805-627-11	LCD PANEL (20.1 INCH VGA TFT)

ACCESSORIES AND PACKAGING MATERIALS

△	1-827-479-11	POWER-SUPPLY CORD (UK)
△	1-827-482-11	POWER-SUPPLY CORD
	*2-067-272-01	INDIVIDUAL CARTON
	*2-067-273-01	CUSHION UPPER
	*2-067-274-01	CUSHION LOWER
	*2-109-154-01	BOTTOM, PAT (20)
	*2-109-155-01	BOX, ACCESSORY
	*4-101-087-02	BAG, PROTECTION CROSS
	2-067-275-11	INSTRUCTION MANUAL (ENGLISH/RUSSIAN/POLISH/ PORTUGUESE)
	2-067-275-21	INSTRUCTION MANUAL (GERMAN/FRENCH/DUTCH/ ITALIAN)
	2-067-275-31	INSTRUCTION MANUAL (DANISH/FINNISH/SWEDISH/ SPANISH)

REMOTE COMMANDER

1-478-815-11	REMOTE COMMANDER (RM-Y1108)
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TRACE

A new TV Repair Assistance Tool that combines ease of use and powerful PC software tools to allow you to save valuable time during many TV repairs.



The TRACE interface connects to the PC's serial port. It provides connection to the TV's I²C bus and can be provided with an InfraRed transmitter (optional).

The interface is powered by a standard 9 V PP3 battery for portable use, and can also be powered by an external 9V/25mA DC power supply.

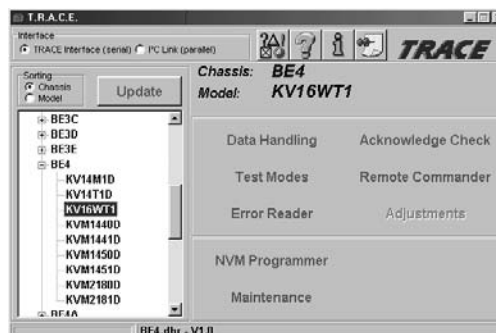
The TRACE software that is supplied with the interface allows you to:

- Read, restore and compare NVM contents via the I²C bus
- Acknowledge check of all I²C devices in the TV set
- Read Error Codes (emulation of the Error Reader tool)

With the optional IR Add-on kit, the following features can be added:

- Remote Commander emulation
- User programmable Functional Check through Infrared
- Fast and documented Test Mode setting of all Sony TV chassis

Additional features such as Adjustments and Troubleshooting are available in chassis-dependent software modules. Please contact your local Sony Service organisation for the latest information.



Note: For workshops already using the existing I²C Link parallel port interface (9-948-320-30), this software can be used as well, replacing the TV Data Handling software (9-948-340-50), but Error Reader and IR functions can only be accessed with the TRACE interface.

Partnumbers:	TRACE Starter Kit (TRACE interface + software):	9-948-320-70
	TRACE Software (for users of the I ² C Link interface):	9-948-340-80
	TRACE IR Add-on (IR interface + Remote Commander software):	9-948-320-80

PC requirements: IBM-compatible PC with operating system Windows95, Windows98, or WindowsNT*.

* WindowsNT only supported with TRACE interface

Sony Corporation
Sony UK
Service Promotions Dept.

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